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A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

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DEALER SERVICE GAINS ON COAST

New Truck Sales In 16 States in First Quarter Only 2% Below Year Ago

Registrations Total 35,656, as Compared With 36,498 in 1929 Period; March Business Declines 10%

NEW YORK, April 24.—The first sixteen states to report complete new commercial car registrations in March, and the District of Columbia, show an aggregate decline in retail sales of trucks of about 10 per cent. from the record-breaking level of the corresponding month of 1929, according to Automotive Daily News statistics.

The aggregate sales in these states last month amounted to 14,092, as compared with 15,803 in the corresponding period of last year, a falling off of only 1,711 units.

The record for this group of states for the entire first quarter of this year as compared with last year was much better than that made in March. The total registrations for the three-month period was 35,656, as compared with 36,498 in the first quarter of 1929, a decline of only 842 units, or 2 per cent.

The sixteen states which have reported March sales are Arkansas, Delaware, Florida, Idaho, Illinois, Minnesota, Missouri, Montana, New Jersey, North Carolina, North Dakota, Ohio, South Carolina, Utah, West Virginia and Wisconsin.

Of these states Idaho, Minnesota, Missouri, Utah, West Virginia and Wisconsin established gains in truck sales in March over the corresponding month of last year. States showing an increase in the sales for the first three months of this year over last were Florida, Idaho, Missouri, New Jersey, Utah, West Virginia, Wisconsin and the District of Columbia.

All the states in the group started the year by registering 10,869 new commercial cars in January, as compared with 9,552 in the first month of 1929, a gain of 1,347, or

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VINCENT BENDIX HONORED BY SWEDISH ORGANIZATION

Chicago, April 24.—Vincent Bendix, president of the Bendix Aviation Corporation, was the guest of honor at a testimonial banquet given by the American Sons and Daughters of Sweden at the Stevens Hotel here yesterday. More than 900 guests were present at the banquet, which was given in recognition of the distinction recently conferred upon Mr. Bendix when he was decorated as commander of the Royal Order of the North Star by King Gustav at Stockholm, Sweden.

Marmon Head Seeks to Aid Employment

Indianapolis, Ind., April 24.—G. M. Williams, president of the Marmon Motor Car Company and chairman of the employment commission of the Chamber of Commerce, is heading a movement here to establish effective methods for making employment in Indianapolis more stable. His plan involves the co-operation of public and private employers and includes formulation of a capital improvements plan as a "pros-

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JOINS CHRYSLER

FRED L. ROCKELMAN, formerly director of sales of the Ford Motor Company, who has become associated with the Chrysler Corporation in an executive capacity, as announced in Automotive Daily News yesterday.

AMERICAN EXPORTS SHOW INCREASE DURING 1929

Washington, April 24.—With low prices ruling for a number of major commodities, the value of American exports last year increased 7½ per cent., as compared with the previous year, the United States Chamber of Commerce revealed today.

ATTENTION TO EQUIPMENT QUALITY WINNING BUSINESS

Survey in Seattle, Portland and San Francisco Reveals Modern Shops Get Jobs Despite Competition

NEW YORK, April 24.—Automobile dealers on the Pacific Coast are paying particular attention to their service business this spring, and those concerns that are giving special attention to quality, price and personnel are offsetting to a good extent any decline they may have in car sales by their increased profits in this field, according to results of a survey conducted by Automotive Daily News representatives in Seattle, Wash.; Portland, Ore., and San Francisco, Cal.

Competition in the service business is increasing, however, and organizations not keeping abreast of the most recent developments in regard to service equipment and shop methods are falling behind, the survey disclosed.

From Seattle comes the word that the smaller independents are being closely pressed to maintain their volume of business and that in all cases it is the well equipped shop that is getting the work.

Portland dealers report volume of business below a year ago, with steady improvement, while in San Francisco business is still below normal but that the dealers are optimistic regarding the remainder of the spring and summer.

SEATTLE, Wash., April 24.—**Service, price and personnel are the three elements that are building greater service business in the Northwest for automobile dealers and distributors and the larger independent shops. The smaller independents are losing ground.**

The organization that is not keeping abreast of the times is falling behind in maintenance business. These are the outstanding trends in this section. "One-stop" stations have been coming to the fore, also, and in all cases it is the well-equipped shop that is getting the business.

The bigger shops and dealers do not lose sight of the fact that with more and more women driving cars and coming in for service, cleanliness is an element of increasing importance. "The women are fussy," as one authority said to the Automotive Daily News representative. "The independents can learn from the car dealer shops, for employees there wear clean uniforms and are

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Cadillac Will Build Engine For Airplane

Detroit, April 24. — "Cadillac Motor Car Company has been assisting in the development of airplane engines since the General Motors Corporation entered aviation," said Lawrence P. Fisher, president, "and in all probability the company will engage in their manufacture as a matter of course.

"Some form of the V-type engine seems most suited for marine and air purposes, and our manufacturing program of the future calls for engines of this type only. We have never considered a departure from the V-type engine nor do we contemplate so doing.

"There has been a demand for Cadillac engines for use in boats continuously since the adoption of the V-type eight-cylinder engine."

W. S. ISHERWOOD FINDS BUSINESS MEN OPTIMISTIC

Flint, Mich., April 24.—Local business leaders in the sections he visited voiced confidence in business conditions and expressed the view that the last half of 1930 would compare favorably with similar periods of recent best years, according to W. S. Isherwood, sales manager of the AC Spark Plug Company, who has just returned from a six weeks' coast-to-coast trip.

PRODUCTION TO INCREASE STEADILY THROUGH SUMMER

By FRED KINGSBURY

DETROIT, April 24.—There has been a great deal of talk recently about the considerable increase in business throughout the United States and the gain in employment in various centers. As far as the motor car business is concerned, there has been some increase, but this could not, by any stretch of the imagination, be called great.

The motor manufacturers in the Michigan district are not anticipating any great jump in business nor are they preparing for anything like this.

They are making more cars, it is true, and they expect to make more cars in May, June, July, August and possibly September. No heavy orders for material are being placed, although commitments for May are heavier than they were for April,

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Industry to Take Part In Safety Conference

Washington, April 24.—The automotive industry of the country and its allied interests will play a promient part in the National Conference on Street and Highway Safety to be held in Washington May 27 to 29, it was indicated today following a preliminary conference with President Hoover at the White House.

The President announced that the governors of all the states and mayors of the principal cities have accepted his invitation to send official delegates to the conference.

This announcement was made following a preliminary conference between the chief executive and the heads of a number of national associations, among whom were Alvan Macauley, president of the National Chamber of Commerce; Thomas P. Henry, president of the American Automobile Chamber of Commerce; W. W. Cloud, president of the National Association of Taxicab Owners; A. V. Hall, Motor and Equipment Association, and William E. Metzger of Detroit.

It was announced that Secretary of Commerce Lamont will act as chairman of the conference here next month.

Lippard to Lead Export Discussion at Washington

Special from A. D. N. Washington Bureau

Washington, April 24.—A variety of important foreign trade problems, including that of the American automotive industry, will be discussed at the eighteenth annual meeting of the United States Chamber of Commerce, to be held here beginning next Monday.

T. R. Lippard

Thomas R. Lippard, president of the Stewart Motor Corporation, will lead a discussion upon the prospects of the inland manufacturer for building up and profiting from export business.

Canada, America's best market abroad, as well as her best source of supply for imported products, will be represented at the meeting by a special delegation. President J. H. Woods of the Canadian Chamber of Commerce will address a general session on the afternoon of May 1 on the subject, "What's Ahead for Canadian Business." William L. Cooper, director of the government Bureau of Foreign and Domestic Commerce, will survey the bright and dark spots in our markets abroad.

Seattle Dealers Report Big Maintenance Gains

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careful about keeping the cars they work on perfectly clean."

Maintenance work has been gradually building this year. Off to a slow start, signs now point to the fact that this will be a big maintenance year in the Northwest.

Particularly are the car dealers waking up to service improvement. All the progressive ones are actively going after more business of this kind. They want the car owner to come back for service at the place where he bought the car. To this end they have been making improvements in shops, adding roominess, equipment and expert workmen.

"Our service business has increased 20 per cent. this year over 1929 thus far," said Don F. Gilmore, service manager of Sands Motor Company, Studebaker dealer. "By the end of the first six months we expect this gain to average around 30 per cent. There is an upward trend, without question. We strive for closer contact with car owners, use direct mail and are aiming for quicker service. To that end we have adopted more freedom and more direct service for the car owner who comes to our service floor. This internal reorganization has proved of help."

E. J. Becker of the Washington Nash Company said: "March has shown a gain of 42 per cent. over February, and up to April 17 we were 32 per cent. ahead of March, so the improvement is gaining momentum. We are paying more attention to service than ever. Our manager, A. B. Graham, has service as his hobby. He comes into the shop and inspects job orders, knows all the workmen by their first names and fully appreciates the importance of this department. We keep a man in the local field to contact car owners. Our work is confined to Nash cars. Each month we hold employee meetings, when we talk mechanics to them, thrashing out mechanical problems, studying the Nash Service News, pictures and new ideas. In our direct mail contact with car owners we offer bargain jobs and try to keep up interest in our particular department."

Another progressive Seattle shop that has been making good strides, which seems to be the general order of the day for the active dealers, is S. L. Savidge, Inc., where J. A. Potts is service manager.

Service Work Picking Up, Portland Dealers Report

PORTLAND, Ore., April 24.—**Service work among the Portland automobile dealers and distributors is, generally speaking, not up to that of last spring, while accessory and parts sales are about holding their own. Some report that conditions have begun to show improvement. Others state that the work is still spasmodic, compared with last year.**

E. N. Jory, service manager for the Oldsmobile Company of Oregon, stated that replacements sales were running 33 1-3 per cent. lower than last year. Asked if he thought that the chain stores were affecting the business he answered in the affirmative. He believes the industry is over-sold, and it is just a matter of "sitting tight" until a balance is reached. It is his opinion that this year as a whole will not be as good as last.

H. Lasquie, service manager for Braley & Graham, Dodge distributors and Plymouth dealers, stated that their service work, while not ahead of last year, is beginning to pick up. He believes that the general slowing up of business is at least partially responsible for the present service situation. Their accessory business was running about on a par with last year.

George Kolibaba, service manager for the Tarola Motor Car Company, Willys-Knight distributors, thinks that people haven't the money to spend on service work. Their volume of work, he said, has not been as great as that of last spring, but accessory sales have been a little better. "I believe things are now on the up grade," he said. "We have been very busy recently."

J. R. Cauble, service manager for the Howard Automobile Company, Buick distributor, stated that their volume was not up to last year's because their sales were not up to last year and they service only new cars. Accessory sales were also running behind, he said, but this was due to the fact that the standard factory equipment is so complete. Headlights and roadlights sales have been cut down since the state passed a law limiting the lights on the front of a car to five. As their cars come equipped with headlights and two parking lights, there remains but one accessory light to be purchased.

L. R. Folard of the Paxson Motor Company, Durant distributors, stated that their service work was running about 30 per cent. less in volume compared with last year. Replacement and equipment sales so far had shown no gain over last year.

San Francisco Dealers Find Service Increasing

San Francisco, Cal., April 24.—Heads of accessory and service departments of San Francisco dealer establishments nearly all report that though the last few months have been a bit under normal for this time of the year the last month is showing better results and are all optimistic for the spring and summer seasons.

J. D. Bowerstock, in charge of the service department of the Pacific Nash Motor Compay, reports that while the last three months of 1929 compared somewhat unfavorably with the corresponding months of 1928, and while January of 1930 was a full 20 per cent. under January of 1929, that February was equal to February of 1929, and March was equal and better than last year's figures. The Pacific Nash Motor Company handles practically no accessories.

M. Mayer of Flynn & Collins (Ford dealers) service department says that their service business is excellent, and that while there was for a time a noticeable cut in accessory sales on account of chain stores cutting in, this condition is being counteracted by this firm by handling nothing but Ford accessories, in which line business is as good as ever. Their February service and accessory sales were better than for February of 1929.

Wm. N. Gordon, purchasing agent of the accessory department of Chester N. Weaver, Studebaker distributor here, finds that tire sales are better than ever, and is quite satisfied with his present accessory business. He feels that the recent disposition of the dealer to cut down his accessory inventory materially will result in just as much business and profits as in the days when he was overstocked—and those days are not far gone. It wasn't always that manufacturers of automobiles supplied new cars with so many of the items that made up a dealer's stock—and many a dealer found himself with an overstock on hand as this trend became more pronounced. Manufacturers have co-operated with the dealer under these new conditions and are supplying better service, quicker deliveries and better discounts on small orders, because they realize that the dealer to operate at a profit must carry a smaller stock and produce a greater turnover of small items. Mr. Gordon also reports that chain stores are not cutting in on his accessory sales.

H. M. Gregory, service superintendent of Chester N. Weaver, Studebaker agent, reports service jobs totaling 3,809 for January and February of 1929, compared with 3,100 for the same months of 1930. This drop he attributes to a drop in new car sales. He also said that the service jobs were smaller—that actually there was a noticeable drop in dollars spent in the service department, since where a customer of a year ago brought in his car at fairly regular intervals for a thorough overhauling, today he goes over the job with the service man and orders only that work which is absolutely necessary. While this new custom of car owners results in lowered income for the department for the month, it will eventually lead to a better understanding between owner and mechanic, with a resultant prosperity for the department, brought about by a definite realization of the work necessary to keep the car in the best of condition and an appreciation of the services given him.

F. M. Carey, of Chanslor & Lyon, wholesalers, also mentioned the growing practice among dealers to hold down their inventory and to purchase more carefully. He, too, feels that the chain store is making little progress in taking sales from dealers, and expressed satisfaction with conditions in the accessory line, stating that he felt that the present situation was a healthy one and one that presaged prosperity for the dealers.

L. W. Harper, purchasing agent of the accessory department for H. O. Harrison, Chrysler dealer, finds that business is as good, if not better, than a year ago. He states that he can only check on new car sales. H. O. Harrison's service manager reported that while new car sales were off a trifle, the service department was prospering and that the first three months of this year were much better than the first three of 1929.

An aggressive sales campaign has been in effect at Don Lee's, San Francisco Cadillac dealer, during this season. Close co-operation between the accessory department and the salesmen of new cars has resulted in increased sales of accessories. While this firm feels that undoubtedly the chain stores have taken some sales from them, they have no way of determining how serious this condition is, since their own sales have increased over last year. To the recent stock market crash does this organization attribute the tendency of car owners to curtail their expenditures in the service department. However, they feel that this tendency is only a temporary one, and view with considerable optimism coming months.

The San Francisco Dodge dealers, J. E. French Company, feel that the slump of the past six months is practically a thing of the past and that sales and service departments will share in the inevitable reaction. This organiation has recently instituted a twenty-four hour service which is not old enough as yet to show great profits. However, they are certain of its eventual success. This firm has many trucks in service and is now ready to take care of these jobs at any time of the day or night.

KILLED IN CRASH

CAPT. LIONEL M. WOOLSON, Army Air Reserve, chief aeronautical engineer of the Packard Motor Company and inventor of the Packard Diesel aircraft engine, who, with two companions, was killed yesterday afternoon when a Diesel-motored four-passenger Verville air coach in which they were flying from Detroit to New York crashed in a blinding snowstorm on a hillside forty miles southwest of Buffalo, N. Y.

INDUSTRY EXPECTS GRADUAL RECOVERY

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but inventories are being kept down at all points.

The writer was talking with a well-known automobile executive this morning who had just returned from a long trip around the United States. He said business is what might be called "slightly soft," that there was a great deal of talk about how well things were improving, but as yet this seemed to be a lot of talk and very little action.

By this he did not mean that business was away below standard. He did mean, however, that less talk and more action would mean much more to the business of the country at the present time.

There was an improvement in motor car production during the month of March, and there will be a still greater improvement during the month of April. This is a foregone conclusion, and is proved by the fact that steel manufacturers are reporting more releases for material by motor makers.

There is no inclination on the part of makers of cars in Michigan to talk of a boom, because there is no such thing in sight. Close students of the motor car business say that this business is in a better strategical position than it was a year ago. They are pointing to sales all over the country, especially during January and a part of February, which indicate that more cars were sold than were made during that period.

Reports from all over the country received at the manufacturing plants during the past week indicate that stocks of used cars are slightly lower, and that sales of vehicles in this class have been good so far during the month of April. Few dealers in the country are overstocked with used units, and the way is clear for new car sales.

Body plants are working and orders are reported fair.

Steady increases are anticipated in the motor car business the balance of this month, and good business is foreseen in May.

SPARKS from DETROIT

Oberheu Rises

* * *

Covell to New York

* * *

Peed Back at Desk

Fred Kingsbury—Detroit Editor

F. A. OBERHEU has been appointed president and general manager of the United Motors Service, which has its headquarters in Detroit. At the same time he announced the appointment of H. W. Anderson as vice-president and assistant sales manager. Mr. Oberheu has been with United Motors for the last twelve years, and for the last year has been vice-president and director of sales. He is very well known in the automotive field throughout the country due to his long service as a sales executive, and he is a great booster of specialized service for motor car owners.

* * *

J. B. Covell, well known in automobile circles in the New York district, has been made district manager of the Chrysler Sales Corporation in that section. He formerly was regional manager for the Plymouth Motor Corporation in New York. B. C. Helm, formerly New York district manager, will be engaged in special sales department work in New York.

* * *

L. G. Peed, general sales manager of the De Soto Motor Corporation, a division of Chrysler, has returned to Detroit after a Western trip.

* * *

Industrial and business leaders of Detroit are ready to go out and get a million dollars to advertise the city, under the leadership of Fred Wardell and Harvey J. Campbell, two well known Detroiters. All of the automobile men are working on the plan, and it is expected the million will be pledged in a short time after the work starts.

* * *

THE Bankers Club of Detroit is to hold its annual banquet and meeting this week, and Charles F. Kettering, vice-president and director of research of General Motors Corporation, will be the principal speaker. Mr. Kettering is always in great demand as a speaker.

* * *

J. L. Fozard, vice-president and general manager of the International Bridge Company, says that March vehicular traffic over the Ambassador Bridge totaled 120,163 passenger and commercial motor vehicles. Pedestrians and passengers during the period from November 15, 1929, to March 15, this year, totaled 1,019,760, which is somewhat below the estimate. However, Mr. Fozard says the summer traffic will soon start, and that travel between the United States and Canada, over the bridge, will be especially heavy.

* * *

THE Detroit News is authority for the fact that in all classes of printing, engraving, publishing and bookbinding in Detroit in 1929, there were 11,548 people employed, with an annual pay roll of $22,400,000, and a commercial output valued at $114,000,000, so it looks as though Detroit is a literary town as well as an automobile town. Today there are three semi-monthly publications in Detroit, eight dailies, thirty-seven weeklies and thirty-nine monthlies, a total of eighty-seven.

MARMON CHIEF MOVES TO AID EMPLOYMENT

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perity reserve" as well as production and sales plans that would tend to regularize employment in co-operating lines of business.

Joint discussions and study planned by the chamber are to be undertaken with the hope that practicable formulas may be produced and Indianapolis may make an important contribution to the national effort of leaders of business and government to solve unemployment problems.

Primary efforts have covered the gathering of facts as to employment. A regular monthly census of employment in all branches, including public departments, has been started, and approximately 200 employers are now co-operating in providing information.

What Car Dealers Are Doing and Saying

Dealer Associations Will Help to Trick the Tricky

Philadelphia, April 24.—A sample of the effective work possible through quick interchange of information between automobile trade associations and a warning to car dealers not to be too ready to sell to a stranger presenting a certified check on an out-of-town bank, are noted in an incident which occurred a few days ago.

A man giving a certain name, according to information from the Philadelphia Automobile Trade Association, easily obtained a new De-Soto and a new Buick car from the Stamford, Conn., Buick company, through a false certified check, although the transaction appeared on its face to be bona-fide. That the check was no good, in spite of its apparent certification, was discovered too late and the man was traced to New York, but when trailed closely was found to have just left for Philadelphia and, according to notification from New York to the Philadelphia Automobile Trade Association, was expected to offer the hypothecated cars for sale, or trade in this city. He had with him a bill of sale from the Stamford Buick Company.

As soon as the local trade association had been notified, announcement of the deal and its circumstances was posted on the bulletin board of the association and a typed copy was placed at every plate in the dining room of association headquarters where the distributors and dealers gather for luncheon. Up to the present, no local tradsman has been "stung" by the alleged faker.

NEW OFFICERS NAMED FOR JACKSONVILLE GROUP

Jacksonville, Fla., April 24. — New officers were elected at the annual meeting of the Jacksonville Automobile Dealers' Association at the George Washington Hotel. S. Z. Down was chosen president; Fred Rankin, vice-president, and C. J. Olmstead, secretary and treasurer. The officers, with James D. Palmer, E. H. Bacon, E. C. Williamson and B. K. Hall, comprise the board of directors of the association.

B. H. Hall, retiring president, presided at the meeting and was given a vote of thanks by the members for his work during the year. The annual reports were read and other routine business transacted. The members of the association are looking forward to a good year in 1930 and there was considerable optimism over conditions with respect to summer and fall business.

MATTSON MOTOR EXPANDS

Centralia, Wash., April 24.—The Mattson Motor Company, Graham-Paige dealers, 608-610 North Tower Ave., has completed a new building adjoining their original structure. It doubles their space and provides commodious quarters for show rooms and offices.

D. C. BURRELLE FORMS HIS OWN ORGANIZATION

New York, April 24.—Douglas C. Burrelle, who for nearly twenty years has conducted one of the largest establishments on New York's Motor Row, specializing in high class used cars, has sold his interest in Douglas C. Burrelle, Incorporated, to the Uppercu-Cadillac Corporation and is now heading his own organization. The Burrelle headquarters are located at 50 West 63d St., in the Empire Building, just west of Broadway. The Burrelle cars are chiefly Cadillacs and La Salles.

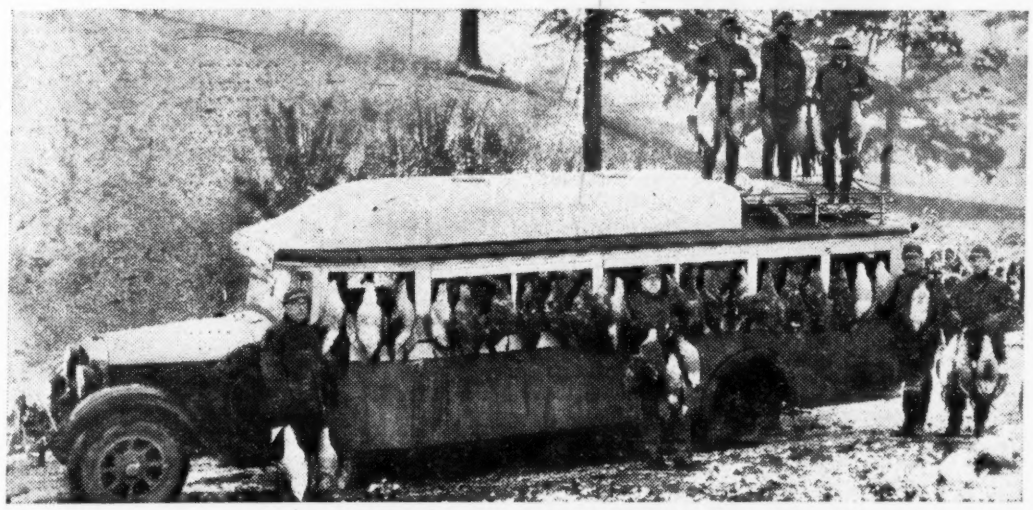
THE TREAT IS ON KNAPP

Altoona, Pa., April 24.—Announcement is made of the appointment of L. H. Knapp as general manager of Millikan Motors, Inc., 1314 12th Ave., distributors of Graham motor cars and Paige commercial cars in Blair and adjoining counties. Mr. Knapp has had wide experience in the automotive business, having entered the field in 1912.

IN NEW HOME

Burlington, Ia., April 24.—The Obrecht Motors Company, which for some time has occupied a sales and service plant at North Fifth Street, has moved to Ft. Madison, and the Burlington Nash Company, formerly at 617 Jefferson St., will occupy the former Obrecht building, 211 North Fifth St.

Cut Yourself a "Honk" of This



SOMETIMES even a wild goose chase fails to substantiate its futility! Here's one which came to a successful conclusion. It was organized by Col. C. S. Reeder, president of the Cherokee Motor Company, Studebaker distributor at Knoxville, Tenn., who, with a party of motor officials and friends, rode east to the coast in a Studebaker bus and returned with a bag of wild geese designed to make a hunter's mouth water. On the ground, left to right, are: H. B. Springer, Col. Reeder, Lee Cate and E. C. Nugent. Standing on the bus, left to right, Gen. Frank Fessey, R. R. Eller and James A. Durham. With the exception of Gen. Fessey, who is from Nashville, all are Knoxville residents. (Editor's note: If we wanetd to be mean, we'd say this picture is published with permission of Quack & Quack, suppliers of hunting scene backgrounds)

TEXAS DEALERS DISCUSS USED CAR PROBLEMS

Fort Worth, Tex., April 24.—Automobile dealers from all over the state met in annual convention here yesterday with discussions of used car problems, service departments and repossessions on their program. A banquet tonight was the only social affair scheduled by the local committee.

B. B. Owen, Dallas, is president of the Texas Automotive Dealers' Association. Speakers included Warren E. Griffith, past president of the National Automotive Dealers' Association, and Wayne Hearne, nationally known authority on automotive merchandising.

MEMPHIS DEALERS ELECT NEW OFFICERS

Memphis, Tenn., April 24.—Jeff F. Hicks of the Erwin-Hicks Motor Car Company, was re-elected president of the Memphis Automobile Dealers Association at a session held at Hotel Chisca. Hugh J. Jetton of the Buff City Buick Company, a former president, was elected vice-president; Thos. H. Smart of Thos. H. Smart Motor Company, Hupmobile dealer, was again elected secretary-treasurer New directors are: Robert G. Chambers of Chambers Motor Company, Ford dealer; James J. Corbitt; Hugh J. Jetton; Thos. Smart and R. R. Price of the Southern Motor Company, Cadillac-La Salle and De Soto dealer. Most of the larger firms of the city are affiliated with the body.

ANTON J. MARTIN TO HEAD CALIFORNIA DEALERS' ASSN.

Los Angeles, April 24. — The Automobile Dealers' Association of Southern California, at its annual meeting elected Anton J. Martin to succeed William H. Cook as president. Other officers elected were: Rube Podolor, first vice-president; Harry Liggett, second vice-president; R. Leslie Kelly, third vice-president; Allen Gwynn, secretary; Harvey Goodwin, treasurer, and Joseph J. Neville, Hugh Marshall and Theodore Nelson, executive committee.

BRUNNER RISES

Chehalis, Wash., April 24.—W. H. Brunner has been appointed sales manager for the Magrini Motor Company, recently appointed Reo, De Soto and Plymouth dealer in this territory.

START SAFETY CAMPAIGN

Raleigh, April 24.—Formation of a citizens' traffic squad to observe and report violations of motor vehicle laws and establishment of drivers' schools are important phases of the intensified accident prevention program which were outlined at a meeting here today of directors of the Carolina Motor Club with Gov. Gardner and afterwards explained to state officials, newspaper men and citizens interested in accident prevention work, according to C. W. Roberts, vice-president of the club.

CLAP HANDS FOR McCLELLAN

Dallas, Tex., April 24.—Promotion of George C. McClellan to the position of assistant general manager of the Graham-Paige Company of Texas, 1914 North Harwood St., is made known by W. O. Wilson, general manager. Mr. McClellan has been associated with the company for the last two years, and has had a number of years' experience in the automobile business.

REPRESENTS MONARK

Chicago, April 24.—The Richard M. Sheridan Company, sales specialist, announces that it is now representing the Monark Battery Company.

Here's What Mr. Cashell Says of the Used Car Situation

Cincinnati, O., April 24.—"In regard to the used car situation," says E. H. Cashell of the Charles Schiear Motor Car Company, "we are showing a complete resume of the situation among our Hudson-Essex dealers in this particular community.

"First: Used car stocks are 50 per cent. below 1929 stocks.

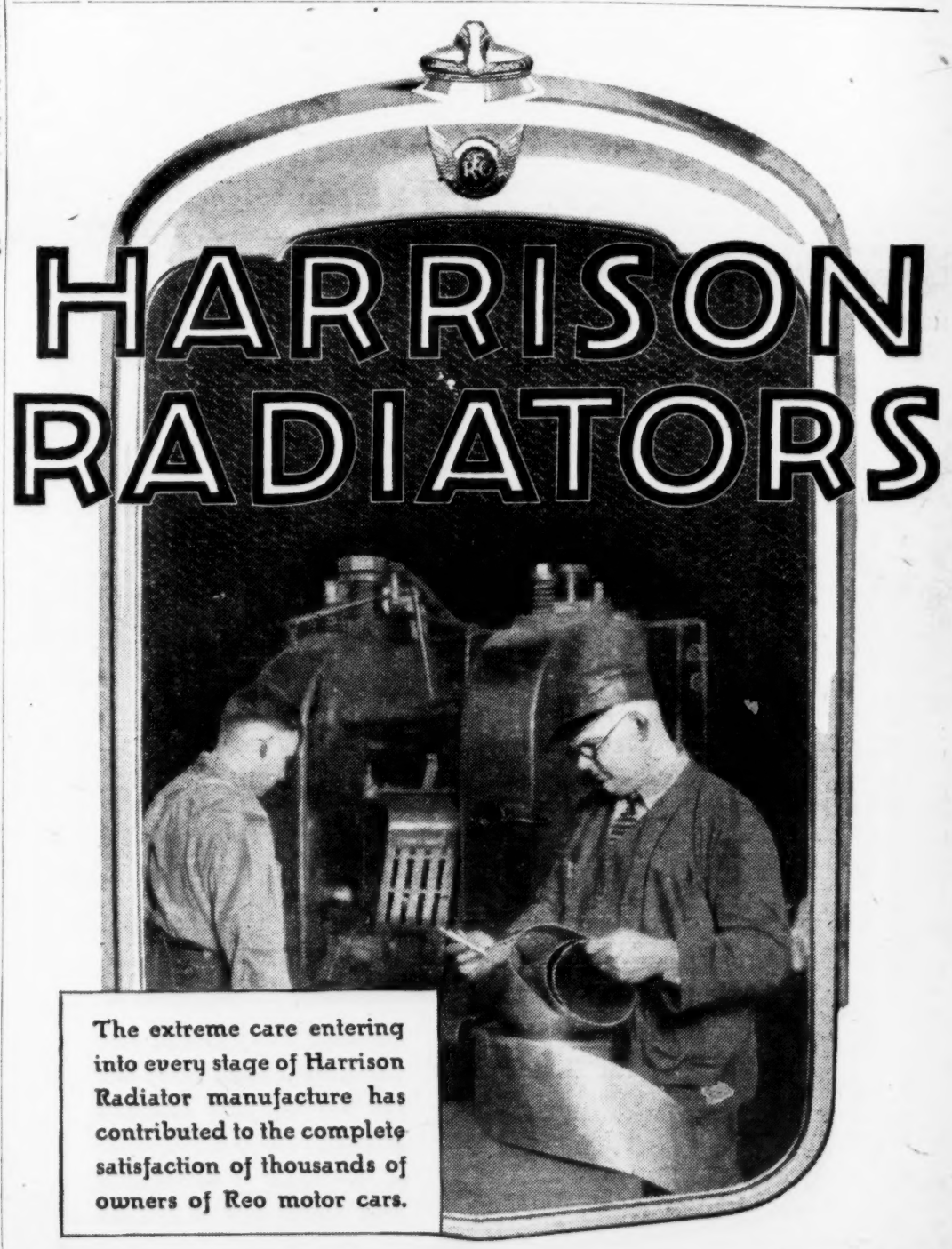
"Second: Used cars turn over once every eight weeks, or in other words, we are moving 15 per cent. of our used car stock every week, as compared with 7 per cent. moving per week in 1929 at this time.

"Third: Average used car trade-in value is $265.00 per car, against $325.00 per car in 1929.

"In spite of the fact that our used car stocks are in healthy conditions, we attribute it to the lack of new car business which we have experienced in 1930 as against 1929, not due to the unusual demand for used cars or the ability of the dealers to buy trade-ins at real value."

PUSHING BOAT SALES

Milwaukee, Wis., April 24.—As the first steps in a proposed extensive campaign of boat merchandising the Studebaker Sales Company, Milwaukee, distributor for Chris-Craft motorboats, has appointed W. E. Olds manager of its boat division and established main offices of the division at its branch at 447 East North Ave.


HARRISON
RADIATORS
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Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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Junking

IN the official announcement of the new junking plan which is being inaugurated by the Cleveland Automobile Dealers' Association, automotive merchants will find a number of interesting features. This announcement appeared in a recent issue of The Automotive Daily News.

The Cleveland dealers, instead of organizing their own junk yard, have called into partnership a firm already in the business with years of experience behind it. This metal dealer will place at the association's call its plant and experience. The dealers' association and the metal expert are to become partners in the venture. The association, however, is to retain its right to say how the scrap material and parts shall be disposed of after the junking has been carried out. There will be no danger of a return to the roads of vehicles sent to the junk yard.

When a dealer sends a vehicle to be broken up he will receive in cash the junk price for it. If his factory is one that is making an allowance for the removal of obsolete vehicles he also gets his set allowance from that source.

This move of the Cleveland dealers is in line with the National Automobile Chamber of Commerce's campaign to promote highway safety by getting off the roads vehicles which through age or other cause are a menace to all highway users. Incidentally, it must not be forgotten that every obsolete vehicle that is removed from the roads opens the way for the sale of a newer motor car or motor truck.

A National Joy Ride

IT is rather an inspiring thought for any one connected with the automotive industry that every man, woman and child in the country could be taken on a national joy ride in our complement of motor vehicles. Yes, we know that every one who has ever ridden over one of our primary paved highways on a summer Saturday or Sunday afternoon will be tempted to say: "They are."

The 26,000,000-odd motor vehicles could very comfortably carry the 4.5 persons which each would be called upon to accommodate in case we ever decided on such a national motor exodus. No nation in history ever has enjoyed such a complete transportation system as the America of today possesses. Compare our estate with that of peoples who indulged in the famous treks of history. The children of Israel struggled along on foot and walked for years to reach the promised land from their Egyptian servitude. A modern automobile would make that famous pilgrimage in a few hours, given a hard road. When the Mayas of Central America and Mexico set off on their inexplicable and mysterious journeys from one section to another, one can imagine the slow, winding procession, working its way through the jungle to the supposed advantages of a new empire. Today battered Fords dash over hard roads to the remnants of the Maya cities and do the distance in hours, where the original inhabitants took months of laborious plodding.

Most of the progress of the human race can be summed up in the single word "transportation," and the greatness and power of this country rests, in the final analysis, on its possession of the most complete transportation system in history.

"THE position occupied by the automobile in the social and economic life of this country today is such as to make it unlikely that anything could seriously disturb this demand and, unless the economic stability and future progress of the United States as a whole can be successfully challenged, it is difficult to see how the present recession in the automobile industry can be regarded as anything but temporary."—Walter P. Chrysler. A little reminder to be pasted in the hat.

New Hampshire Car Sales High

CHEVROLET HAS 19.3% INCREASE

First Quarter Shows Only 4.4% Loss From 1929

NEW YORK, April 24.—With a total of 979 new car registrations in March, New Hampshire came within 7.9 per cent. of equalling the record established for this month in 1929. In the first quarter the total registrations were 1,464, a loss of 4.4 per cent. for the same period last year.

Chevrolet and Ford both showed gains in March, the former being 19.3 per cent. above the same month last year, and the latter 10 per cent. greater. Cadillac, De Soto, Erskine, Hupmobile, Oldsmobile, Pierce-Arrow and Reo all recorded increases in March.

In the first quarter Chevrolet had a gain of 36.3 per cent., while Ford's increase was 13.1 per cent. Other makes showing gains in the quarter were: Auburn, 25 per cent.; De Soto, 27.6 per cent.; Erskine, 53.8 per cent.; La Salle, 50 per cent.; Oldsmobile, 6.3 per cent.; Pierce-Arrow, 300 per cent., and Reo, 18.2 per cent.

The March registrations, compared with the same month last year, showing percentage gain or loss, follow:

	1930	1929	Pct. gn. or loss.
Auburn	4	4	..
Buick	42	48	*12.5
Cadillac	3	1	200
Chevrolet	253	212	19.3
Chrysler	20	23	*13
Cord	1	..	..
De Soto	22	21	4.8
Dodge	20	25	*20
Durant	11	18	*38.8
Erskine	12	6	100
Essex	36	84	*57.1
Ford	341	310	10
Franklin	3	11	*72.7
Graham	6	17	*64.7
Hudson	19	24	*20.8
Hupmobile	12	6	100
Jordan	1	..	..
La Salle	2	2	..
Lincoln	1	..	..
Marmon-Roosevelt	1	9	*88.8
Marquette	6	..	..
Nash	19	37	*43.3
Oakland	6	10	*40
Oldsmobile	26	19	36.8
Packard	7	12	*41.6
Peerless	1	2	*50
Pierce-Arrow	4	1	300
Plymouth	11	11	..
Pontiac	35	48	*27.1
Reo	11	9	22.2
Studebaker	15	29	*48.3
Whippet	6	51	*88.2
Willys	18	..	..
Willys-Knight	4	9	*55.5
Miscellaneous	..	4	..
Totals	979	1,064	* 7.9

*Loss.

The first quarter registrations, compared with the same period last year, showing percentage gain or loss, follow:

	1930	1929	Pct. gn. or loss.
Auburn	5	4	25
Buick	60	60	..
Cadillac	3	3	..
Chevrolet	403	297	36.3
Chrysler	29	31	*6.3
Cord	2	..	..
De Soto	37	29	27.6
Dodge	29	38	*23.7
Durant	15	25	*40
Erskine	20	13	53.8
Essex	51	129	*60.5
Ford	527	466	13.1
Franklin	4	13	*69.3
Graham	7	22	*68.2
Hudson	24	36	*33.3
Hupmobile	12	12	..
Jordan	1	1	..
La Salle	3	2	50
Lincoln	1	..	..
Mar'n-Roosevelt	2	10	*80
Marquette	8	..	..
Nash	28	54	*48.1
Oakland	9	15	*40
Oldsmobile	34	32	6.3
Packard	10	20	*50
Peerless	1	2	*50
Pierce-Arrow	4	1	300
Plymouth	14	15	*6.6
Pontiac	46	63	*26.9
Reo	13	11	18.2
Studebaker	22	39	*43.6
Whippet	8	71	*88.7
Willys	23	..	..
Willys-Knight	9	9	..
Miscellaneous	..	8	..
Total	1,464	1,531	*4.4

*Loss.

DETROIT INTERNATIONAL BRIDGE TRAFFIC HEAVY

Detroit, April 24.—With advent of warm weather, traffic over the Ambassador Bridge, connecting Detroit with the border cities of Ontario, is far exceeding preliminary estimates made when the structure was planned, according to J. L. Fozard, vice-president and general manager of the Detroit International Bridge Company.

COMING EVENTS

APRIL

12-27—Milan, Italy. Italian International Automobile Show.
24-25—Cleveland, O. National Petroleum Association meeting.
28-May 3—Henderson, N. C. Automobile Show.

MAY

1- 3—Chicago, Ill. American Gear Manufacturers' Association annual meeting.
1-10—Melbourne, Australia. International Motor Show.
8—New York.. Society of Automotive Engineers, aeronautic meeting.
23-27—Atlantic City, N. J. American Society for Testing Materials annual meeting.
27-29—Washington, D. C. National Conference on Street and Highway Safety.
28-29—French Lick Springs, Ind. Society of Automotive Engineers' summer meeting.
29-July 13—Posen, Poland. International Motor and Transport Show.
30—Indianapolis, Ind. Automobile Race.

JUNE

2-12—Paris, France. Automobile Salon.
9-12—Detroit, Mich. American Society of Mechanical Engineers semi-annual meeting.
16-25—London, England. Olympia Motor Show.
23-26—San Francisco, Cal. Meeting American Electric Railway Association.

SEPTEMBER

29-Oct. 4—Pittsburgh, Pa. National Safety Council Annual Safety Congress.

OCTOBER

6-11—Washington, D. C. Sixth International Road Congress.
6-11—Washington, D. C. American Roadbuilders' Associtaion convention.

NOVEMBER

6-16—Berlin, Germany. International Automobile Show.
8-15—Chicago, Ill. Automobile Salon at Drake Hotel.
10-14—Cleveland, O. Motor and Equipment Association Show.

DEALER DOINGS

Newark, N. J., April 24.—The Reo sales convention held at the Newark Athletic Club has been concluded. About 100 dealers and their passenger car salesmen from northern New Jersey and Staten Island were present at the sessions.

Los Angeles, April 24.—George S. Pelton, southern California Marmon-Roosevelt distributor, has opened a sales salon at 6266 Hollywood Blvd., to serve the Hollywood territory. H. P. Larsen is branch manager.

Jersey City, N. J., April 24.—Auburn-Wacker Motor Company, 1737 Boulevard, Jersey City, has been formed to sell and service Auburn cars. The concern has capital of $25,000. J. Jacob Wacker, Jersey City; Mae W. Wadley, West Orange, and Antranig Aslanian, West New York, are the officers.

Hartford, Conn., April 24.—Sleeth & O'Connor, West Hartford, handling the Nash line, has retired from the car sales field. J. C. Sleeth, one of the founders of the business, has joined Burke, Nash, Inc., Nash distributor, at 410 Main St.

Birmingham, Ala., April 24 (UTPS)—The Smith Motor Company, Whippet and Willys-Knight dealer in North Birmingham, has moved to its new location at 3002 North 27th St. The company was formerly located at 3224 North 27th St.

Charlotte, N. C., April 24.—Thomas Cadillac-La Salle, Inc., local Cadillac-La Salle dealership, has been chartered with an authorized capital of $100,000, of which $12,500 was subscribed by G. C. Thomas, J. Henry Gaston and B. Bristol.

Simple, Safe and Efficient

Simple . . . because the fitting is a one-piece sleeve slipped over the cable end. No solder. No clips or other additional parts to complicate design.

Safe . . . because Tru-Loc Fittings are uniform in strength. Exhaustive tests by leading engineering authorities have yet to prove a single case where a Tru-Loc Fitting has failed to exceed specification strength.

Efficient, because the Tru-Lay Cable and Tru-Loc Fitting Assemblies come to you ready to install. Write for detailed information.

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MERCHANDISING
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WHOLESALE

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

BOSTON JOBBERS SEE MIXED TREND IN FIRST QUARTER

Watching Turnover Move Closely; Weeding Out Slow Lines

BOSTON, Mass., April 24.—In general, the wholesale and jobbing situation in this territory presents mixed conditions, according to the lines handled by the various concerns queried. Some report good business, others "fair," or no better than last year at this time. Some of the smaller houses are experiencing a little "heavy weather."

About all agree, however, that they must look more closely to turnover this year, scrutinize credits more carefully, and weed out lines of merchandise that are becoming dead stock or dying out.

Post & Lester say: "Business is fair. There is a very good equipment business with service stations and others, especially for compressors and lifts and machines for overhaul work. The business is there if it is gone after, but it must be uncovered. We have helped to plan many layouts for garages and service stations, which has helped us, and even our competitors, for we often recommend the machine of another house if we don't have it, and feel that it is one that ought to be installed to make a well-rounded layout."

Wetmore-Savage Company: "We find many frozen credits in the retail trade. What is needed is a general business revival all over the country, before the individual garage and serviceman can get much business. We are now 'twixt hay and grass' in the wholesale and jobbing trade, and on through the retail accessory and parts trade. The normal people—those who average $25 to $30 a week, and operate a small car or used car—need to get to work in large numbers before there will be a general revival of the automotive parts trade.

"Our March total business shows an increase, but we note a tendency to softness and hesitancy on the part of retailers. Bargains are being snapped up, of course, for there are always some dealers who have ready money to take advantage of them. We found this to be true with some thousands of dollars worth of material that we got at a good figure so that we could pass the advantage along to our dealers."

W. J. Connell Company, special equipment distributor, reports business as "coming along very nicely," especially in new lines, such as metal tire covers and the new Gabriel shock absorber. The new metal spring cover seems to find good acceptance. Big returns are coming in from radio broadcast advertising of the new Lorraine controller bolt riding light. Hundred per cent. returns are coming from this advertising medium for the light, and also for the shock absorber. The Connell Company is broadcasting on the light mornings daily and the shock absorber evenings, the latter with the Gabriel Minute Man "turn."

Jackson Electric Company: "The first three months of this year were about the same as last year, but we expect the next three quarters, especially the next two to be far better than last year. New car deliveries in this state are 4,000 less than last year, which means that car owners will overhaul their present machines more thoroughly, and that will increase the repair business all around. Credits were not so good around the first of the year as last, and down to the present. One has to go out after them and pry out the money. Wholesalers and specialty men must watch their credits carefully at the start, and keep them from freezing up.

"We are putting in $2,000 worth of shop equipment, to help out our small dealers and garage men. It saves our trade and saves the retailer as well as ourselves from carrying heavy stocks, and at the same time give fast service to customers. From now on wholesalers must watch thei rinventories, turnover and credits. We believe those in the big centers will do well to set up and equip a machine shop as a big money and time saver for themselves and their dealers. The old line jobber must clean house, get down to essentials, get rid of the slow selling accessories and carry only meritorious staples. Then he can hold his trade and increase it. When the car manufacturers put a certain type of equipment on the car it is time for the wholesaler to clean out his stock of that item and keep it out of his stock."

Linscott Supply Company: "We find sales below normal for this time of year, though April credits have improved over March, though still below normal. The best prospects are seen from the jobbing angle, due to the decreased sale of new cars and more general overhauling of older ones. The season for us in New Hampshire, Vermont and Maine, where we have a large list of dealers, is late owing to the weather. In general retail men are not giving long credits this year. They are insisting upon the cash, which, while a good thing, is holding up much overhaul and repair work.

"We are getting considerable and increasing business from fleet owners (who generally maintain their own repair shops), filling station and repair men. The fleet owners are becoming a 'back log' for our line. They have generally unlimited credit or strong resources and we are making an extra drive for this class of business. The filling stations are doing more small repair jobs and the car owners have learned to have greasing done oftener, which is opening up a field for the filling stations and giving us more business in small equipment."

Editor's Column

EVERY so often jobber associations receive inquiries and expressions from automotive manufacturer members which indicate the high valuation that these manufacturers place upon the distribution of their products through automotive jobbers.

These expressions indicate an appreciation of the many advantages offered by jobber distribution and a sincere desire to defend their own business and that of their jobbers against any other method of placing their products in the hands of dealers, even though very tempting plans are submitted to them from time to time.

They indicate, also, however, that these manufacturers are anxious to see greater activity among the jobbers in the sale of modern equipment required by car dealers, if they are to continue to fully protect the jobber. Car manufacturers are insisting that their dealers equip themselves with modern service equipment. In a number of instances where dissatisfaction with jobber distribution was expressed, these car manufacturers have planned to distribute the equipment themselves..

Recently a sales manager for a manufacturing company illustrated this desire of manufacturers to protect their jobber channels against other systems which very often offered tempting inducements. This company received an offer from a prominent car manufacturer's service department to distribute their shop equipment directly to this manufacturer's dealers through field representatives who called on the dealers.

"If we undertook to sell your organization and other car manufacturers who have approached us on the same subject," the sales manager wrote, "it would break down the confidence we have built among the jobbers with whom we now do business. It has been our experience that manufacturers who sold through jobbers and also sold equipment to car manufacturers for resale to the dealers lost the confidence of the automotive jobbers."

Such an instance suggests the value of closer cooperation between jobbers and manufacturers' service men who travel in their territory. Several of the car manufacturers who have adopted policies of selling equipment and tools to their dealers, have stated that they would prefer to have this business handled by jobbers but were forced to solicit it themselves in some districts through apparent inability of the jobber in that district to do so.

It might prove beneficial to jobbers to work more closely with the field representatives who call on car dealers so that the jobbers can demonstrate the superiority of their service over anything the manufacturers can offer to their dealers in this particular field.

LINCOLN, NEB., JOBBERS PLANNING TRADE TRIP

Lincoln, Neb., April 24.—Jobbers and manufacturers group of the chamber of commerce will take another trade trip May 13, 14 and 15 over northeast Nebraska territory, having recently completed a similar tour through southeastern Nebraska. Six manufacturers and jobbers of automotive supplies will be represented on the May tour, as compared with five on the trip just completed. The tour will be made by bus and will include the following Nebraska towns: Osceola, Clarks, Columbus, Fullerton, Albion, Neligh, Madison, Norfolk, Stanton, Pilger, West Point, Fremont and Wahoo, with night stops at Columbus and Norfolk.

RETURN FROM CONVENTION

Nashville, Tenn., April 24.—R. M. Neil, manager of Firestone Service Stores, and R. W. Woy, branch manager of the wholesale department at Nashville, have returned from a convention of Firestone representatives held at Jacksonville, Fla. Harvey S. Firestone, president of the company, addressed the meeting.

ROBERT MACFEE TALKS TO INDIANA GROUP

Detroit, April 24.—Robert Macfee, secretary of the National Standard Parts Association, talked before the Indiana Automotive Dealers' and Maintenance Association on the subject, "How Associated Effort Rings the Cash Register," at a banquet held at the Elks' Club, Indianapolis, on April 16. Three hundred members of the association were present.

A. J. Knable, executive secretary of the Indiana A. A. A., told of a campaign to bring tourists to Indiana during the coming summer and pointed out the increase in business that a heavy tourist trade will produce.

Steve Hannegan, publicity manager for the Indianapolis Memorial Day race, talked briefly on the plans for this year's race and also stressed the importance of preparation in repair shops for accommodation of the rush of tourist trade which is already beginning.

ROLLER BEARING CO. NOW OPERATING 5 WAREHOUSES

Trenton, N. J., April 24.—The Roller Bearing Company of America has just recently completed arrangements and now has in operation five warehouses with complete stocks in the following locations: New York city, 250 West 54th St.; Chicago, 2037 South Wabash Ave.; Kansas City, Mo., 14th and Oak Streets; Dallas, Tex., 2705 Williams St.; Atlanta, Ga., Spring Street, N. W.

BUYS FOR EXPANSION

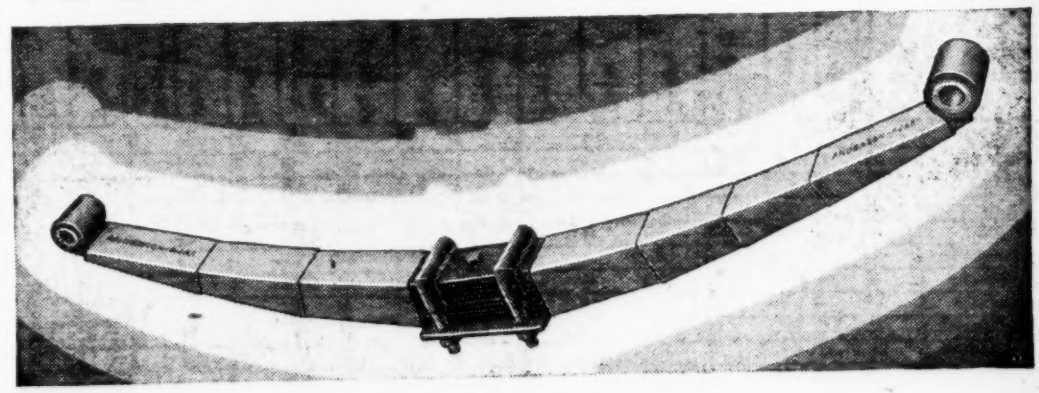
Memphis, Tenn., April 24.—Orgill Brothers, wholesale accessory and hardware dealer here and in Jackson, Miss., has purchased the two-story brick warehouse known as the Morrison Building at Jackson for expansion.

Mid-States Auto Electric To Distribute Carter Carburetors in Chicago

Chicago, April 24.—Announcement is made by the Carter Carburetor Corporation of the appointment of Mid-States Auto Electric Company, Chicago, as Central distributor in the Chicago area, which includes northern and central Illinois and northern Indiana. The Mid-States Auto Electric Company is a new organization in the automotive specialty distributing and service business. C. M. Montz, head of the Wisconsin Magneto Company, Milwaukee, is president, and R. L. Putman, formerly shop superintendent of the Pellet Magneto Company, and later connected with the Motor Car Service Company, Chicago, is manager.

At the beginning of the present year, the Mid-States Auto Electric Company became Illinois and northern Indiana distributor for the Eisemann magneto, taking over the establishment at 2005 South Michigan Ave., Chicago, formerly operated as a factory branch of the Eisemann Magneto Corporation. Within four months, growth of the new company made it necessary to move into larger quarters at 2446-8 Indiana Ave.

WEATHER-PROOF YOUR SPRINGS WITH STEEL



Springs — unprotected — are easy prey to rain, mud, and gritty dust. They rust, stiffen, squeak . . . and bumpy rides soon take the place of smooth, quiet ones.

So weather-proof the springs—with Anderson-Ajax Steel Spring-Covers. Then new car comfort will last as long as the car itself. They seal in penetrating graphite lubrication . . . keep out the weather. Tests show that spring oscillations are increased 60% by water lubrication and decreased 40% by corrosion. It is this variation that destroys riding comfort. Such variation is impossible when springs are steel armored.

1930 cars that are bringing motorists the added comfort of weather-proof springs include Cadillac V-16, Nash twin-ignition 8, Nash twin-ignition 6, and Peerless.

Anderson Manufacturing Company, 155 Sidney Street, Cambridge, Mass.

Distributed to automobile manufacturers from the factory at Cambridge, Mass. Detroit office, Mr. George H. Hunt, 2-244 General Motors Building. Sold and serviced to the wholesale and retail trade by three thousand Gabriel distributors the world over.

ANDERSON-*Ajax*
Steel SPRING COVERS
Fully Protected By Patents

Truck Sales for First Quarter Near Year Ago

(Continued from Page 1)

14 per cent. In February business fell off slightly, with sales of 10,695, as against 11,143 in February, 1929, a decline of 448 units, or 3 per cent. Despite the larger decline in March, the large gain in January saved the quarter for the group, enabling them to escape with a 2 per cent. decline, which is considered a highly favorable record in view of general conditions this year.

On the basis of sales of commercial cars, business in six of the states now under review was at a higher level in each month of the first quarter of this year than in the corresponding months of last year. These states are Idaho, Minnesota, Missouri, Utah, West Virginia and Wisconsin, in each of which the registrations in January, February and March were in excess of 1929.

Following are the new commercial car registrations in the sixteen states and the District of Columbia in March, 1930, as compared with the corresponding month last year and February, 1930:—

	Mar. 1930	Mar. 1929	Feb. 1930
Arkansas	324	507	268
Delaware	142	157	96
Florida	444	572	755
Idaho	171	125	105
Illinois	2,386	3,223	2,141
Minnesota	889	1,056	536
Missouri	3,011	2,579	2,284
Montana	309	507	231
New Jersey	1,448	1,694	1,000
North Carolina	589	791	452
North Dakota	206	226	123
Ohio	1,813	2,253	1,224
South Carolina	273	349	230
Utah	234	213	109
West Virginia	424	403	267
Wisconsin	1,298	962	748
Dist. of Col.	131	186	126
Totals	14,092	15,803	10,695

Here are the sales in the group for the entire first quarter of this year, as compared with last:

	1930	1929
Arkansas	971	1,427
Delaware	304	316
Florida	2,028	1,138
Idaho	360	276
Illinois	6,954	8,297
Minnesota	1,860	1,936
Missouri	5,808	4,611
Montana	773	1,110
New Jersey	4,035	3,755
North Carolina	1,640	2,394
North Dakota	495	592
Ohio	4,507	5,501
South Carolina	1,073	1,086
Utah	489	461
West Virginia	1,020	882
Wisconsin	2,919	2,348
District of Columbia	420	368
Totals	35,656	36,498

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AXLES

The automotive industry knows these are

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CLARK EQUIPMENT COMPANY
Buchanan Michigan

AXLES
Front & Rear
WHEELS
Single or Dual Tire
CAST STEEL HOUSINGS
TRANSMISSIONS

Along the Bus Routes

Austin, Tex., April 24.—L. C. Henry has been granted a permit by the Texas Railroad Commission to operate a motor bus line between Corpus Christi and Three Rivers, and the Mid-Continent Bus Line has been given a certificate to operate a bus line from Fort Worth to the state line at Texarkana on a route from Fort Worth to Little Rock, Ark.

Richmond, Va., April 24 (UTPS).—J. B. Bocock, of Pulaski, Va., has received his new bus and will inaugurate a special bus service about town, operating it on a regular schedule through the principal sections and to plants in East Pulaski. It is an innovation in this character of device, the town now having only jitney service.

Fort Angeles, Wash., April 24.—The Olympic Peninsula Motor Coach Company has just opened a new $50,000 terminal here. A civic celebration was a high light of the opening. Those who were active participants in the exercises included R. D. Conrad of Seattle, operating manager of the Washington Motor Coach Company of which the Port Angeles concern is a subsidiary; R. T. Whiting of Seattle, vice-president and general manager of the Washington Motor Coach Company; Clay Wolverton and A. D. Wolverton, who founded the Port Angeles bus line; Charles D. Kimball, Port Angeles manager, and his assistant, O. E. White. The terminal is 150x60 feet in size and is of reinforced concrete construction. In addition to regular terminal facilities it also houses a specially equipped machine shop.

Richmond, Va., April 24 (UTPS).—A bus terminal committee, named under a councilmanic resolution, has begun the consideration of a project to secure for Lynchburg, Va., a new and adequate bus terminal. The present Church Street terminal, operated by the Eastern Bus Lines, is inadequate and located where traffic congestion is intense. The committee is inquiring into possible locations and methods of financing for a terminal on Commerce Street.

Montgomery, Ala., April 24 (UTPS).—Two applications for operating bus lines in the state of Alabama were received recently by the Alabama Public Service Commission. R. E. Barfield asks permission to operate between Dothan, Ala., and Bainbridge, Ga., and Tom Daniel between Huntsville, Ala., and Manchester, Tenn.

Jersey City, N. J., April 24.—Paparelli Bus Company, 1598 Boulevard, Jersey City, has filed incorporation papers. It is empowered to issue $125,000 worth of stock, divided into 1,250 shares at $10 each. Incorporators, all of the company's address, are Fred, Emil and Helen Paparelli.

San Antonio, Tex., April 24.—The Southland-Greyhound Lines, Inc., of this city, has announced plans for the construction of a bus terminal at Lake Charles, La., the eastern terminus for these lines. The new station will be designed after the Spanish type of architecture, of one-story with hollow tile, stucco and concrete. In addition to the operation departments and accessories, it will have a number of store spaces. E. C. Ekstrom is president of the lines, and Dave Wolziner is the representative in Lake Charles.

Orange, N. J., April 24.—Operation of the Orange-Montclair bus line from Lackawanna Plaze, Orange, to Lackawanna Plaza, Montclair, has been resumed by Public Service Coordinated Transport on the schedule maintained prior to discontinuance of the service about a month ago, it was said today at the Public Service offices in Newark.

MOTOR BUSES REPLACING NEW HAMPSHIRE TROLLEYS

Concord, N. H., April 24.—Motor buses have almost completely replaced street cars in the cities of New Hampshire, according to a statement made by H. Styles Bridges, a member of the Public Service Commission.

Mr. Bridges said that Concord, Manchester, Berlin and part of Nashua are the only municipalities now having electric car service.

The Nashua Street Railway Company now has asked the commission for authority to abandon the remaining street car service in that city and substitute buses.

TRUCK LINE PERMIT LAW CONSIDERED IN CANADA

Montreal, April 24.—Applications by several local firms for permits to operate automobile trucks under schedule as public service carriers of freight and express merchandise between this city and outside points in the province came into conflict before the Public Service Commission, with the result that the entire question was taken en delibere to permit the commission to decide what policies it shall adopt in applying the law which now places automobile truck lines under its control in the same way as autobus lines.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

WISCONSIN AXLES

—known for the trouble-free service they give; and for the efficiency with which they convert engine power into performance.

WISCONSIN AXLE CO.
Oshkosh Wisconsin

Cumulative New Commercial Car Registration Table, March, 1930

Returns for today: New Jersey, North Carolina, District of Columbia.

Some of this data has been published previously, but it is given here complete for the convenience of our subscribers.

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Readers desiring county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies. Commercial Car Registrations do not include buses.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Dover	Fargo	Federal	Ford	G. M. C.	International	Mack	Paige	Pierce-Arrow	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys	Willys-Knight	Miscellaneous	Totals	States
Arkansas			118		9				149	9	26	2	1			2		1					5	2			324	Arkansas
Delaware	9	4	47		3				60	8	6	2				1				2							142	Delaware
Florida	1	5	123		6				276	7	10	3				6						2	4	1			444	Florida
Idaho			50		4				94		6	8				2		2					1	1		3	171	Idaho
Illinois	5	9	723	77	71	1	9	16	944	61	218	24	2		5	35	2		15	6		21	25		22	95	2386	Illinois
Minnesota		2	291	4	31		3	3	422	11	70				1	18		2			2	4	6	8	4	7	889	Minn.
Missouri	9	23	1111	24	120	1	12	16	1228	47	208	5	8		1	30	6	4	1	8	11	43	9	38	5	43	3011	Missouri
Montana			98		3		3	1	135	5	43	1				4		2				6	1	6		1	309	Montana
New Jersey	3	31	367	6	60	2	8	8	675	34	46	83	3	1	2	28	1	1	11	5	10	4	14		7	38	1448	N. Jersey
N. Carolina	8	1	240		23	1			239	4	47	2				9					1	1	11	1		1	589	Nor. Car.
N. Dakota			68	3	5		4		80	2	34					1		1				2		5		1	206	N. Dak.
Ohio	6	16	493	5	57	3	9	9	856	59	109	5			2	32	4	4	4	9	1	25	50	10	8	37	1813	Ohio
S. Carolina			129		9		1		121	4	3	1				1	1					1	2				273	S. Car.
Utah			75		7				119	7	11					8		2				1	2			2	234	Utah
W. Virginia		5	128	3	20	1	3		195	17	32				1	10				1			1	2	2	3	424	West Va.
Wisconsin		4	482	11	36	1	5	14	543	22	80		1			24		1	3	7	2	12	4	18	2	26	1298	Wis.
Dist. of Col.		1	34	2	6			3	63	7	3				1	8							1			2	131	D. of Col.
Totals	41	101	4577	135	470	10	57	70	6199	304	952	136	15	1	13	219	14	20	34	38	27	122	136	92	50	259	14092	Totals
Ark., 1929			217	1	19		1		229	4	25					3					1	1	4			2	507	Ark., 1929
Del., 1929			65		4				57	11	7	1		2		4	1	1					4				157	Del., 1929
Fla., 1929		2	200		12		1	1	307	9	18	2				8	1				1	5	4			1	572	Fla., 1929
Idaho, '29			40		8				47	5	11	7				4		3									125	Idaho, '29
Ill., 1929	10	18	992	144	185		10	25	1145	91	267	42		1	1	80	2		17	5		24	28			136	3223	Ill., 1929
Minn., 1929			374		37			8	447	24	98	2		1	2	31		2			4	17	6		3		1056	Minn., '29
Mo., 1929	7	18	997	35	145		9	37	801	108	188	33				54	3	5	2	1	16	56	23			41	2579	Mo., 1929
Mont., 1929			105		40			2	220	18	96	1		1		13		2			1	1	2		1	4	507	Mont., '29
N. J., 1929	18	25	489	6	78		12	20	604	55	48	83		22		57		3	3	8	7	19	35		4	98	1694	N. J., '29
N. C., 1929	3	1	412		40				272	15	13	9				6	2	1			3	5			1	8	791	N. C., '29
N. Dak., '29			68		8			2	56	10	62			1		6		1				2				10	226	N. D., '29
Ohio, 1929	12	11	837	16	106		16	12	857	50	88	25		1	2	66	2	2	1	5	8	42	47		7	40	2253	Ohio, '29
S. Car., 1929		1	186		23			9	113	5	10	1											1				349	S. Car., '29
Utah, 1929			61		11		1		108	3	13	3				4		2			1	1	4			1	213	Utah, '29
W. Va., '29		3	142	2	28				161	11	34				3	9		1		1	1	2	1			4	403	W. Va., '29
Wis., 1929			366	18	46		4	13	355	20	66	3		2	1	14			7	7	5	5	7		1	22	962	Wis., 1929
D. of C., '29	2		50	5	8				94	7	10	4				1			2			1	1			1	186	D. C., '29
Totals, 1929	52	79	5601	227	798		54	129	5873	446	1054	216		31	9	360	11	23	32	27	48	181	167		17	368	15803	Total, 1929

Production--Engineering--Factory

STAMPING METHODS AND MACHINERY GREATLY IMPROVED

By WILIAM E. SCHAEFFER
Industrial Engineer Motors Metal Manufacturing Company

THE development in stamping equipment and methods has been more pronounced in the last decade than in any other like period of its history. In fact, it is safe to say that the improvements made during the past decade have exceeded the combined progress of all time.

The development of the stamping equipment and methods now in use, as it pertains to the automotive industry, is interwoven with research work, engineering, designing and mechanics. In reviewing the past eighteen years, one is thoroughly impressed with the progress made, and more especially is this so of the past decade. The pioneers in the industry were confronted with many obstacles. First, a lack of equipment; second, a lack of knowledge of proper materials; third, a lack of co-ordination on the part of the steel mills, their research departments and their metallurgists; fourth, a lack of vision on the part of the management as to the magnitude of the job ahead of them. Great presses had to be designed, engineered and built and it was very difficult, in the early stages of the development, for the average man to conceive of presses capable of an extended pressure of 5,000,000 pounds and weighing several hundred tons.

Stampings that were not made on ordinary crank presses in the early days were made under drop presses. The dies were made from wood or plaster of paris models. The lower die was invariably made of cast iron and the upper die of lead, zinc and antimony. These were termed semi-soft dies and were capable of giving production of a kind up to 3,000 or 4,000 units. Then the upper die was recast and the process went on again.

The next step in development was the hydraulic press. This method had its advantages and its disadvantages. Superior workmanship was possible under this method, but the operation was too slow for the average plant. However, many of these presses are still in use today.

With the coming of the toggle, or double action, press, the entire development began to accelerate very quickly. Heavy, massive dies were necessary, weighing many tons, and the method and manner of handling these dies became an important factor. Large, overhead cranes were installed and the whole picture took on the aspect of a gigantic undertaking. The handling of massive dies, tons of sheet steel, the removing of scrap metal, the building of presses, osme of which projected through the roofs of the buildings reaching a height of forty feet, the building of efficient foundations and the pits under same for auxiliary equipment, all became questions of great importance.

The designing of dies and the manufacture of same to produce auto body panels, roof panels, fenders, hoods, radiator shells, etc., has become both a trade and a science, and is therefore a highly specialized undertaking. In fact, one is safe to say that it has developed to an exact science. The exactions have had far-reaching consequences and called for the best brains in the industry, starting with the body engineer, the pattern maker, the tool and die designer and the training of men. However, it did not stop here, as we soon learned that we needed help of a greater scientific caliber, to produce suitable steel sheets for the difficult forms and draws necessary to beautify the automobile and give rigidity and strength to our product. Naturally, the most skilled men available were called into this work, both in the laboratories of the mills and in the shops. The results have been most remarkable, as many seemingly impossible forms are being stamped and drawn today.

Bear in mind the exactness with which specifications must be adhered to, so as to produce refined steel sheets, capable of being distorted in every conceivable shape. The most exacting chemical analysis, the most approved heat treating and the most careful rolling of the sheets are necessary to produce acceptable steel sheets for this work. The exterior or finish of these sheets is very important and great precautions must be taken in the final analysis of the steel, also in the formation and upkeep of the dies. This is especially so in auto body and fender stampings.

One of the greatest phenomena of the steel made for this purpose is the action of the metal under climatic changes undergone in shipping from one place to another, and very often the steel must be acclimated before it can be used. What happens in the drawing of this steel is known to the trade as stretcher or draw strains, which appear before the point of inertia is reached in the pull of the metal. These appear upon the surface in large waves and various other forms. To eliminate this undesirable condition, rerolling is resorted to, in what is called breaker rolls. This will often eliminate the strains, but does not always entirely do so. The cause of these strains has been a great bone of contention between the officials and personnel of the steel mills and the craft of the stamping trade. However, within the past six years there has been the most wholehearted co-operation between the steel mills and the trade to scientifically reach their objective, which is a superior quality at a cost.

The building of breaker rolls has meant the saving of millions of dollars to the auto body builder through the saving of scrapped panels and the reduction in metal finishing costs, and, if you please, it does not stop here. It has meant the saving of many millions to the steel mills. The first breaker rolls were designed and built fourteen years ago by one of the engineers of the Motors Metal Manufacturing Company.

The trend of the times has made a marked impression on the design of body stampings. Many beautiful effects have been created with the use of reveals, raised and sunk panels, beads and artistic moldings. This tendency, of course, has added greatly to the grief and worry of the stamping executives and the personnel of their organizations. However, they have courageously met every condition and have surely given freely of their time and knowledge to the beautifying of the automobile, which is one of the master accomplishments of this age.

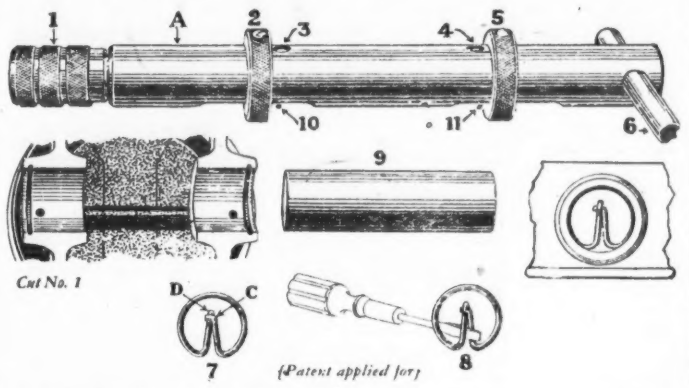
For years Germany surpassed us in the drawing of hot and cold metals. However, owing to exactions placed upon the sheet metal industry by the Automotive Engineer, we have far outclassed Germany, England, Italy, and today they are making frantic efforts to catch up to us in the field, and they are quickly adopting our methods. They are employing our engineers, our die designers and our toolmakers. In fact, various members of the craft who have been associated with the writer of this article are now in Moscow, Russia; London, England; Berlin, Germany, and in Bombay, India, and they are all engaged in this work.

It remains to be seen if they will reach us and surpass us in this work. Let us keep a watchful eye and co-operate fully to the end that our combined efforts will keep the margin of safety to our credit.

SYRACUSE PLATING CO. MOVES TO LARGER PLANT

Syracuse, N. Y., April 24.—The Syracuse Plating Company has removed from 315 East Water St. to more commodious quarters at 212 Bear St., where facilities for all kinds of automotive plating work have been provided. The company is working on contracts plating shift levers for the Durston Gear Corporation and Ford windshield wiper parts for the Owen-Dyneto Corporation. W. A. Shuler is general manager.

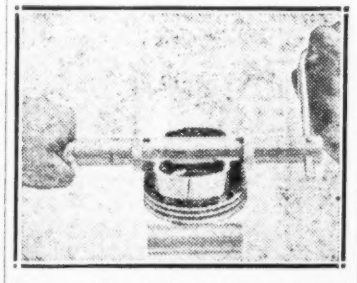
New Klick-A-Way Ford Wrist-Pin Tool Offered



CONTINENTAL MOTOR REBUILDERS, INC., Minneapolis, Minn., is offering the Klick-A-Way grooving tool for inserting Klick-A-Way wrist pins and Clevelox safety lock rings, a combination which is said to remove all idling click from model A Ford engines.

In this combination grooves are cut into the piston bosses, as shown in the cutaway view at the lower left of the illustration above. The safety rings are sprung into these grooves holding the piston pin, which is a floating type, in place. Safety rings are shown at 7 and 8. The Klick-A-Way wrist pin is shown at 9.

The grooving device required in making the pin changes is shown at the top of the illustration. The feed nut at 1, controls the action of the cutters, 10 and 11. In using the tool the feed nut 1, is turned to the left until the cutters 10 and 11 are drawn flush with the face of the tool. Collar 2, is removed and the tool inserted into the piston



bosses. The tool is then centered in the bosses so that the sockets 3 and 4 are shown equally on the outer sides of the piston bosses. The collars are then brought up flush to the ends of the bosses and locked with a set screw. Handle 6, as shown in cut 2, is rotated while the feed nut is held stationary. This causes the cutters 10 and 11 to expand, cutting the grooves into which the safety rings are snapped.

New G. E. Device Operates Machines by Light Rays

The interruption of a beam of light controls the operation of industrial machinery and other devices by utilizing of a new device, the photo-electric relay, announced by the General Electric Company as an addition to its standard line of control equipment. The new relay is essentially a vacuum tube device, and uses both the photo-electric tube and the pliotron.

Many industrial or other operations in which a change of light is involved can be controlled by the new relay. In addition, many operations which can be arranged to cause a change of light can be so controlled. A machine, for example, which travels in a certain direction for a certain distance and is then stopped or reversed is a typical application. When the traveling mechanism reaches its limit it would interrupt a beam of light falling on the photo-electric tube and thus cause the control device to function.

Another example of application would be in counting items such as bags of material, or boxes, where mass production is involved. As each item passed through the essential beam of light, it would cause the photo-electric relay to operate and actuate a magnetic counter. Vehicles passing a definite point can be counted in like manner. An example of this application is found in the Holland Tunnel, where automobiles are counted by the photo-electric relay.

A third type of application would be sorting packages according to size, shape or reflecting power. Other examples would be stopping a paper machine when the paper breaks, aligning the paper on the rolls of the same machine, turning electric signs or signals on or off, depending on the intensity of the outside light; deflecting packages on conveyors and operating bag-piling mechanisms.

The use of the photo-electric relay to control lights or illuminated signs according to the intensity of daylight is an interesting one. In an office or factory building it is always desirable to have a certain minimum light for the workers. During the daytime, when the daylight intensity is high, no artificial lighting is needed. By using the new relay, the artificial lights can be turned on automatically when the daylight intensity falls below the predetermined minimum.

The new relay bears the General Electric designation CR-7505-A-1. It is designed for use in controlling an electric circuit in response to an increase or decrease in the amount of light falling on the photo-electric tube. The General Electric Company lists the following advantages resulting from its use:

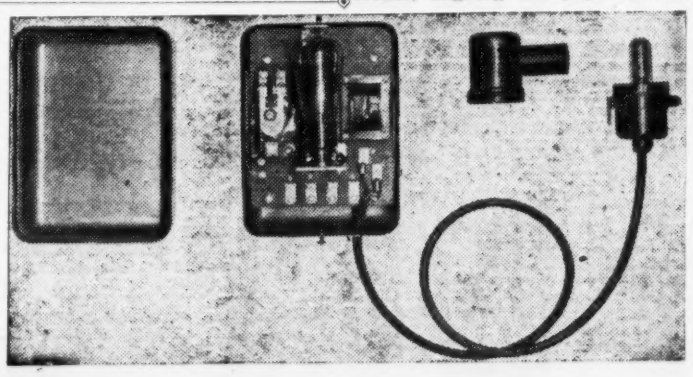
1. It operates without shock or resistance to the progress or movement of the object which actuates it, or without impairing the accuracy of delicate mechanisms.
2. It can be located remotely from the equipment controlled, thus permitting mounting in small spaces around automatic machinery.
3. It is adjustable in sensitivity.
4. It can be used outdoors by mounting in a watertight enclosing case.
5. It is easily installed, and its operation is easily adjusted or changed.
6. It can be operated at high speeds, 100 times a minute being an approximate maximum.

For some applications it may be necessary to select carefully a suitable light source and optical accessories, but for many cases the light source may be a domestic Mazda lamp with or without a simple reflector and shield.

The standard electric supply for the relay is 110/120 volts, 60 cycles, alternating current. The device may, however, be built on demand for other frequencies or voltages, and a similar device for operation where only direct current is available can be obtained.

The operation of the relay is described technically as follows: With a voltage of proper polarity and magnitude applied between the two elements of the photo-electric tube, the current it passes is proportional to the amount of light shining on it. This current (of the order of a few microamperes) is amplified by a pliotron. The sensitive relay is connected in the plate circuit and is energized or de-energized in accordance with the amount of light on the photo-electric tube. The contacts of the relay control the coil circuit of the contactor. When the relay in the plate circuit of the amplifier is energized it will first open its normally closed contacts and then close the normally open contacts. This relay, therefore, either makes or breaks the coil circuits of the contactor, depending on how it is connected.

When the contactor is de-energized approximately ten watts is required by the device, and when the contactor is energized approximately thirty watts is required.



MANY ADVANTAGES CLAIMED FOR NEW SALPA LEATHER

A DEVELOPMENT of major importance to the entire automotive industry—with particular reference to body manufacturers in their work with top and interior upholstery and trim—was announced this week in the publication of detailed plans for the commercial manufacture of Salpa re-hided leather by the American Salpa Corporation.

Through the processing of new leather and hide cuttings, Salpa leather can be created in gigantic "new hides," more than 750 feet long.

Coming in huge rolls, this mass production of large unit leathers at a low price is of especial importance to the automotive world.

Leather's sturdiness, wearing qualities, and beauty appeal has never been fully available to the automobile. The new product offers this availability at a cost range barely above the artificial coverings now used. The new leather is waterproof, even if the coating has been broken. It can be finished in the widths most readily worked. It can further be finished in all the finishes and grains that are necessary.

An added asset in the introduction of this product in automobile manufacture is the part that the identic equipment now used on rolls of artificial leather can also be used with Salpa.

$3,000,000 PLANT ERECTED

Salpa leather is now in full production at the $3,000,000 plant which the American Salpa Corporation has designed and built for the exclusive manufacture of the product at Spotswood, N. J.

The plant includes fourteen manufacturing, administration, laboratory and storage buildings having more than 300,000 square feet of floor space, and located on a plot embracing 65 acres of land.

Production and distribution of the product are in the hands of an executive group assembled from the key industries of America. This group has been perfecting marketing plans for the past year, and a national distribution organization for Salpa leather has been perfected. Meanwhile a laboratory staff of scientists and technicians is working on the methods of applying Salpa leather with greatest production economies, and on developing new leather uses. More than 250 uses for Salpa leather have now been worked out.

Not a Leather Substitute

"Salpa leather is in no sense of the word a leather substitute," an announcement by the American Salpa Corporation states. "It is a revolutionary leather product, having certain advantages over leather in its original state."

"Salpa leather is strong, flexible, durable and workable, and has a full-bodied richness. It lends itself extremely well to embosing, in some instances to an even greater depth than leather of similar thickness. It is unusually well adapted to gold stamping. It also lends itself to impregnation with certain dyes at the time of manufacture, to the end that these dyes are apparent throughout the entire structure of leather. It cuts and skives with ease. Representatives are now being located in Boston, Chicago, St. Louis, Cincinnati and Philadelphia. E. R. Zorgniotti is managing director of the corporation, with S. B. Jordan as controller and W. M. Turnley as general sales manager.

MAJOR SPECIFICATIONS AND MECHANICAL DETAILS OF

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Am. La France Chief	2	3650	Own	6	3¾x5	33.0	Pw	Str	Vac	DR	Own	C	4	Tim	Wo	31.2	4	D	156	6200	32x6	32x6D
Am. La France W	3-4	3950	Own 2 R	4	4¼x6	28.9	CS	Zen	Vac	AB	Own	C	4	Own	2R	47.4	4	R	160	7200	S36x5	S36x5D
Am. La Fran. Chieftain	3-4	5500	Own	6	4⅛x5⅛	40.8	Pw	Zen	Vac	DR	Own	C	4	Tim	Wo	28.8	4	D	175	7200	S36x8	36x8D
Am. La France V	5	5500	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	Wo	54.4	4	R	165	9800	S36x5	S40x6D
Am. La France Z	6½	5750	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	Wo	63.5	4	R	165	10000	S36x7	S40x7D
Am. La France U	7½	6000	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	—	63.5	4	R	165	10500	S36x7	S40x8D
Am. La Fran. Big Chief	6	6725	Own	6	4½x6	48.6	Pw	Zen	Vac	DR	Own	C	4	Own	2R	32.8	4W	D	226	10600	S40x8	S40x8D
Autocar S A	1½	2700	Her	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S A	Sp	27.9	4	R	150	4400	32x6	32x6
Autocar S D	2	3000	Her	6	3¾x4½	33.8	Pb	Zen	Vac	L-N	Br-L 35	U	4	Own S D	2R	33.9	4	R	150	4850	32x6	32x6D
†Autocar H	3	3750	Own	6	4¼x4¾	32.4	CS	Str	Gra	AB	Own T	U	4	Own H	2R	48.9	R	R	114	5800	34x5S	36x10S
†Autocar S H	3	4000	Own	6	4¼x4¾	43.4	Pb	Str	Gra	RB	Own T	U	4	Own H	2R	48.9	R	R	114	5800	34x5S	36x10S
Autocar T	3	5000	Own	6	4¼x4¾	48.6	Pb	Str	Vac	RB	Own T	U	4	Own T	2R	72.5	R	R	187	7100	36x8	36x8D
†Autocar H S	3½	4100	Own	6	4¼x4¾	32.4	CS	Str	Gra	AB	Own T	U	4	Own J	2R	55.2	R	R	114	6900	34x6S	36x12S
†Autocar S H S	3½	4400	Own	6	4¼x4¾	43.6	Pb	Str	Gra	RB	Own T	U	4	Own J	2R	55.2	R	R	114	7000	34x6S	36x12S
Autocar T S	3½	5350	Own	6	4¼x4¾	48.6	Pb	Str	Vac	RB	Own T	U	4	Own Chs	2R	81.7	R	R	187	7100	36x8	36x8D
Autocar S C M	5	5000	Own	6	4½x4¾	48.6	Pb	Str	Vac	RB	Own B	C	4	Own M	2R	72.1	R	R	162	8600	34x7S	36x14S
Brockway 65	1	1195	Con 27 B	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36000	Sp	21.3	4	Tr	137	3400	30x5	30x5
Brockway 75	1¼	1290	Con 27 B	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Aut	Br-L 20-4	U	4	Col 36000	Sp	25.6	4	Tr	137	3450	32x6	32x6
Brockway 90	1½	1525	Con 27 B	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Aut	Br-L 20-4	U	4	Col 55000	Sp	25.6	4	Tr	149	3850	32x6	32x6
Brockway JR	1¼	1195	Wis C	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.3	4	Tr	130	3100	30x5	30x5
Brockway E 45	1½	1765	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 30	U	3	Col 55001	Sp	21.0	4	Tr	139½	3650	32x6	32x6
Brockway KW	3	4100	Wis H	6	4 x5	38.2	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 1228	2R	33.7	R	Dr	170	6920	34x7	34x7D
Brockway R	4	4200	Con L 4	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 66600	Wo	46.8	R	R	164	7890	36x5S	36x12S
Brockway RT	4	4850	Con B 7	4	5 x6	40.0	Pw	Zen	Vac	Eis	Br-L 60	C	4	Tim 66700 S	Wo	53.5	RV	Dr	175	8100	36x5S	36x12S
Brockway 120	2	1990	Con 30 B	6	4 x4⅛	38.4	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 54100	Sp	—	4	Tr	156	5200	32x6	32x6D
Brockway 140	2	2495	Con 30 B	6	4 x4⅛	38.4	Pb	Zen	P	Aut	Br-L 35	U	4	Wis 4916 L	2R	—	4W	Tr	156	5500	32x6	32x6D
Brockway 290	7	7250	Con 36 B	6	4¾x5¾	54.15	Pb	Str	P	L-N	Br-L 70-7	C	7	Tim 68703 D	Wo	—	4W	Dr	182	10750	38x7	40x14S
Brockway 640	10	9700	Con 36 B	6	4¾x5¾	54.15	Pb	Str	P	L-N	Br-L 70-7	C	7	Tim S W 400	Wo	—	4W	Dr	212	14000	38x7	36x10S
Brockway T	5-7	5200	Con B 7	4	5 x6	40.0	Pw	Zen	Vac	Eis	Br-L 60	C	4	Tim 68700	Wo	53.5	R	Dr	175	10065	36x6S	36x14S
Chevrolet	½	365	Own	6	3 5/16x3¾	26.3	CS	Car	P	DR	Own	U	3	Own	Sp	12.68	4	R	107	1815	4.50x20	4.50x20
Chevrolet	1½	550	Own	6	3 5/16x3¾	26.3	CS	Car	P	DR	Own	U	4	Own	Sp	6.165	4	R	131	2375	30x5	30x5
Day Elder M F	1¼	1345	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Br-L	U	4	Tim 52000 H	Sp	24.2	4	D	131	3500	30x5	30x5
Day Elder G F	1½	2050	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Br-L	U	4	Tim 54000 H	Sp	28.3	4	D	156	4400	30x5	30x5D
Day Elder H F	2	2500	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Br-L 35	U	4	Tim 63702 H	Wo	40.7	4	D	156	4900	S34x4	S34x7
Day Elder J F	3	3900	Con 18 R	6	4 x4½	38.4	Pb	Zen	Vac	DR	Br-L 51	U	4	Tim 65001 H	Wo	41.5	4	D	156	7000	34x7	34x7D
Day Elder K F	4-5	5000	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	DR	Br-L 60	C	4	Tim 66702 DH	Wo	55.2	4	D	162	9200	S36x5	S36x12
Day Elder N 6 W	7	6000	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	DR	Br-L 60	C	7	Tim SW 200 H	Wo	73.6	6	D	204	10000	34x7	34x7D
Diamond T 200	1	785	Bud	4	3¾x4½	22.5	Pw	Zen	P	Aut	W-G	U	4	Cla	Sp	—	4	D	128½	3050	30x5	30x5
Diamond T 215	1	885	Bud	6	3⅜x4	27.3	Pw	Zen	P	Aut	W-G	U	4	Cla	Sp	—	4	D	135¼	3150	30x5	30x5
Diamond T 290	1½	1475	Her WXA 2	6	3½x4½	29.4	Pb	Zen	Vac	Aut	Cov	U	4	Col	Sp	—	4	D	156¼	4160	30x5	30x5D
Diamond T 303	2	1745	Her WXB	6	3¾x4½	33.7	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	—	4	D	160½	4850	32x6	32x6D
Diamond T 551	2½	2250	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	—	4	D	168	5600	32x6	32x6D
Diamond T 503	2½	2660	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Wo	—	4	D	174	6200	34x7	34x7D
Diamond T 506	2½	2820	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Wis	2R	—	4	D	172½	6200	34x7	34x7D
Diamond T 602	3	3440	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	C	4	Tim	Wo	—	4	D	169½	7500	36x8	36x8D
Diamond T 606	3	3500	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	U	4	Wis	2R	—	4	D	186	7500	36x8	36x8D
Diamond T 700	3½	3740	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	C	4	Tim	Wo	—	R	D	162	8100	S36x5	S36x10
Diamond T 801	4	4140	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	C	7	Own	Wo	—	6WH	D	189½	8300	36x8	4 wh 36x8
Diamond T 1000	5	4420	Her YXC 2	6	4½x4¾	48.6	Pb	Zen	Gra	Aut	Br-L	C	4	Tim	Wo	—	R	D	170½	9700	S36x6	S40x12
Diamond T 1600	8	6260	Her YXC 3	6	4⅝x4¾	51.3	Pb	Zen	Gra	Aut	Br-L	C	7	Tim	Wo	—	4W	D	190	11700	36x8	4 wh 36x8D
Diamond T 2500	10-12	8000	Wak 6 RB	6	5 x5¾	60	Pb	Zen	Gra	Mag	Br-L	C	7	Tim	Wo	—	4W	D	194	13100	S36x7	4 wh 36x12S
Dodge Bros. U-1	½	545	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	3	Own	Sp	14.28	4	D	109	1900	5.00x20B	5.00x20B
Dodge Bros. U-1	¾	695	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	3	Own	Sp	21.68	4	D	124	2460	5.50x20B	5.50x20B
Dodge Bros. U-1	1	795	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	4	Own	Sp	36.136	4	D	133	2750	6.00x20B	32x6
Dodge Bros. DA1	¾	795	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	3	Own	Sp	19.21	4	D	124	2560	5.50x20B	5.50x20B
Dodge Bros. DA1	1	895	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	33.45	4	D	133	2850	6.00x20B	32x6
Dodge Bros. DA1	1	1095	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	140	2955	30x5	30x5
Dodge Bros. DA1	1½	1365	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	150	3695	32x6	32x6
Dodge Bros. DA1	1½	1415	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	165	3810	32x6	32x6
Dodge Bros. DB1	2	1595	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	150	3930	32x6	34x7
Dodge Bros. DB1	2	1645	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	165	4070	32x6	34x7
Dodge Bros. DB1	3	1845	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	46.31	4	D	135	4235	32x6	32x6D
Dodge Bros. DB1	3	1895	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	41.43	4	D	165	4520	32x6	32x6D
Dodge Bros. DB1	3	1945	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	46.31	4	D	185	4715	32x6	32x6D
Dover	¾	595	Own	6	2¾x4½	18.27	Pb	Mar	Vac	Aut	Own	U	3	Own	Sp	—	4	4	110	2150	30x5	31x5.50
Durant Com. Chassis	½	495	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	16.16	4	4	107	1670	28x4.75	28x4.75
Fargo Packet	½	545	Own	6	3 x4⅛	21.6	Pb	Str	Vac	NE	Own	U	3	Own	Sp	14.29	4	Tr	——	1835	5.00x19	5.00x19
Fargo Clipper	¾	725	Own	6	3⅛x4¼	23.4	Pb	Str	Vac	DR	Own	U	3	Own	Sp	15.53	4	Tr	——	2325	5.50x18	5.50x18
Fargo Freighter	1	795	Own	6	3 x4⅛	21.6	Pb	Str	Vac	NE	Own	U	4	Own	Sp	37.19	4	Tr	——	2785	6.00x20	32x6
Federal 4FW	1	980	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	DR	W-G T9	U	4	Cla B370	Sp	40.8	4	Tr	127	2975	30x5	30x5
Federal E6	1	1090	Con 17 E	6	3⅜x4	27.3	Pb	Zen	P	DR	W-G T9	U	4	Cla B370	Sp	34.6	4	Tr	132	3120	30x5	30x5
Federal F7	1½	1525	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Own	U	4	Tim 52005H	Sp	21.3	4	Tr	132	3750	30x5	30x5D
Federal A6	2	1855	Con 16 C	6	3¾x4⅝	27.3	Pb	Zen	Vac	DR	Own	C	4	Cla B610	Sp	38.5	4	Tr	151	4580	32x6	32x6D
Federal A6T	2½	2185	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Own	C	4	Tim 58000H	Sp	41.3	4	Tr	151	4950	32x6	32x6D
Federal T10P	2½-3	2740	Con 16 R	6	4 x4¼	38.4	Pb	Zen	Vac	DR	Own	C	4	Tim 58000H	Sp	36.3	4	Tr	165	6600	34x7	34x7D
Federal T10W	2½-3	2915	Con 16 R	6	4 x4¼	38.4	Pb	Zen	Vac	DR	Own	C	4	Tim 65001H	Wo	44.0	4	Tr	165	6600	34x7	34x7D
Federal U6	3-3½	3860	Con 18 R	6	4 x4½	38.4	Pb	Str	Vac	DR	Br-L 55	C	7	Tim 65706HP	Wo	64.6	4	D	165	7210	34x7	34x7D
Federal 4C6A	4-5	4735	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	Vac	DR	Br-L 55	C	7	Tim 66704HP	Wo	73.6	4	D	192	8330	36x8	36x8D
Federal 4C6AB	4-5	4960	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	Vac	DR	Br-L 55	C	7	Tim 66704TWP	Wo	73.6	4W	D	192	8600	36x8	36x8D
Federal X8	7½	5085	Con B 7	4	5 x6	40	Pw	Zen	Vac	AB	Br-L 60	C	7	Tim 68700DP	Wo	110.9	R	D	162	9750	36x6S	40x14S
Federal X8R	7½	5810	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	Vac	DR	Br-L 60	C	7	Tim 68700DP	Wo	110.9	R	D	162	10000	40x8	40x8D
Ford A A	1½	520	Own	4	3⅞x4¼	24.0	Sp	Zen	Gra	Own	Own	U	4	Own	St	42.24	4	4	131½	2792	6.00x20	32x6
F. W. D.—H	1½	3300	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Cotta	C	4	Own	St	38.1	4	R	121	5300	34x7	34x7
F. W. D.—H 6	2	3425	Wak	6	3½x4½	29.4	Pb	Zen	Vac	Eis	Br-L	U	4	Own	St	35.0	4	R	133	5500	34x7	34x7
F. W. D.—BTL 4	2	3900	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	84.7	4	R	120	6000	36x8	36x8
F. W. D.—HH 6	2½	4000	Wak	6	3¾x4½	33.7	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	101.0	4	R	133	5700	36x8	36x8
F. W. D.—B	3	4200	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	3	Own	St	35.6	4	R	124	6460	36x6S	36x6S
F. W. D.—B 5	3	4525	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	5	Own	St	88.6	4	R	132	6800	36x6S	36x6S
F. W. D.—B T	3	4742	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	101.0	4	R	133¾	7700	40x7S	40x5SD
F. W. D.—U 4	3	4575	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7000	36x6S	36x6S
F. W. D.—U 6	3½	4575	Wak	6	4 x4¾	38.6	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7200	36x6S	36x6S
*F. W. D.—X 6	6	6500	Wak	6	4¼x4¾	43.3	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	4	170	9500	36x8	36x8
Garford Series S 11	1	1600	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	P30x5	P30x5
Garford Series S 11	1½	1900	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	P30x5	DP30x5
Garford Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	4700	P34x5	DP34x5
Garford Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4500	P32x6	DP32x6
Garford Series 40	2	3240	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	4900	P36x6	DP36x6
Garford Series 40	2½	3240	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	5100	P36x6	DP36x6
Garford Series 60	2½	4580	Bud B U S	6	4 x5⅛	38.4	PC	Zen	Vac	Aut	Br-L	U	5	Tim	W	63.0	4	D	175	7000	P36x6	DP36x6
Garford Series 60	3	4680	Bud B U S	6	4 x5⅛	38.4	PC	Zen	Vac	Aut	Br-L	U	5	Tim	W	63.0	4	D	175	7100	P36x6	DP36x7
Garford Series 80	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	PC	Zen	Vac	Aut	Br-L	A	7	Tim	W	98.2	4	D	175	8200	S36x6	S36x12
Garford Series 80	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	PC	Zen	Vac	Aut	Br-L	A	7	Tim	W	98.2	4	D	175	8400	S36x6	S36x14
Gen. Mot. T11-1601	*3800	625	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Pontiac	Sp	14.7	4	D	109⅝	1980	5.00x19B	5.50x19B
Gen. Mot. T15-1501	*5400	695	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51500	Sp	16.09	4	4	130	2625	5.50x20B	5.50x20B
Gen. Mot. T17-1701	*5500	735	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51505	Sp	16.04	4	4	130	2650	6.50x20B	6.50x20B
Gen. Mot. T17-1707	*6500	750	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51505	Sp	16.04	4	4	130	2670	5.50x20B	32x6
Gen. Mot. T19-2201	*6300	895	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	34.45	4	D	130	2850	5.50x20B	32x6
Gen. Mot. T19-2214	*8500	985	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	34.45	4	D	130	2925	30x5	30x5D
Gen. Mot. T25-2501	*6800	1235	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	29.62	4	D	130	3375	6.00x20B	7.50x20B

1930 COMMERCIAL CARS BUILT IN THE UNITED STATES

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Gen. Mot. T25-2509	*8500	1280	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	29.62	4	D	130	3425	30x5	30x5D
Gen. Mot. T30-3206	*9000	1555	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1617	Sp	28.6	4	D	141	4450	6.00x20B	8.25x20B
Gen. Mot. T30-3203	*11000	1605	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1617	Sp	28.6	4	D	141	4525	32x6	32x6D
Gen. Mot. T42-4206	*10600	1735	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1717	Sp	33.38	4	D	141	4575	7.00x20B	9.00x20B
Gen. Mot. T42-4203	*14000	1960	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1717	Sp	33.38	4	D	141	4905	36x6	36x6D
Gen. Mot. T44-4401	*12000	1965	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat T44DR	2R	40.89	4	D	141	4825	32x6	32x6D
Gen. Mot. T44-4404	*15000	2095	Buick	6	3 1/8x4 5/8	28.3	Pb	Mar	P	DR	Mun	U	4	Eat T44DR	2R	40.89	4	D	141	5095	34x7	34x7D
Gen. Mot. T60-6202	*16500	3035	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Mun	U	4	Tim 65706	Wo	52.53	4	D	154 1/4	6625	34x7	34x7D
Gen. Mot. T60-6205	*18500	3125	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Mun	U	4	Tim 65706	Wo	52.53	4	D	154 1/4	6625	9.00x20B	9.00x20DB
Gen. Mot. T82-8202	*19000	3795	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim 66704	Wo	84.91	4	D	155	7100	9.00x20B	9.00x20DB
Gen. Mot. T82-8207	*22000	4070	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim 66704	Wo	84.91	4	D	155	7450	38x7	38x9D
Gen. Mot. T90-9001	*23000	5885	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim SW-200	Wo	75.04	WR	D	185 1/4	9100	7.50x20B	7.50x20D
Gen. Mot. T90-9004	*28000	6055	Buick	6	3 3/4x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim SW-200	Wo	75.04	WR	D	185 1/4	9475	8.25x20B	8.25x20DB
Gotfredson RB-26	1 1/4	1295	Con	6	3 3/8x4	27.3	Pb	Joh	P	DR	Br-L	U	4	Tim	Sp	—	4	D	Opt.	3400	30x5	30x5
Gotfredson RB-36	1 1/2	1595	Con	6	3 3/8x4	27.3	Pb	Joh	P	DR	Br-L	U	4	Tim	Sp	—	4	D	Opt.	3900	32x6	32x6
Gotfredson RB-46	2	2100	Her	6	3 3/4x4 1/2	33.8	Pb	Joh	P	DR	Br-L	U	4	Tim	Sp	—	4	D	Opt.	5140	32x6	34x7
Gotfredson RW-46	2 1/2	2585	Her	6	3 3/4x4 1/2	33.8	Pb	Joh	P	DR	Br-L	U	4	Tim	Wo	—	4	D	Opt.	5600	34x7	34x7
Gotfredson RW-56	3	3395	Her	6	4 x4 1/2	38.4	Pb	Joh	P	DR	Br-L	U	5	Tim	Wo	—	4	D	Opt.	6600	S36x5	S36x5D
Gotfredson RW-66A	3 1/2	4475	Her	6	4 3/8x4 3/4	45.9	Pb	Joh	P	DR	Br-L	U	7	Tim	Wo	—	4	D	Opt.	7800	S36x5	S36x6D
Gotfredson RW-86A	5	5200	Her	6	4 5/8x4 3/4	51.3	Pb	Joh	P	DR	Br-L	C	7	Tim	Wo	—	4	D	Opt.	9000	S36x6	S36x7D
Gotfredson RW-106A	7 1/2	5675	Her	6	4 5/8x4 3/4	51.3	Pb	Joh	P	DR	Br-L	C	7	Tim	Wo	—	4	D	Opt.	10000	S36x7	S36x8D
Gotfredson RW-206A	12	10500	Bud	6	4 3/4x6	54.15	Pb	Joh	P	DR	Br-L	C	7	Tim	Wo	—	6	D	Opt.	14000	S36x8	S36x8D
*Gramm B	1 1/2	1495	Lyc 4 SL	6	3 1/4 x4 1/2	25.3	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	34.3	4	Tr	140	3800	30x5	30x5D
*Gramm C	2	1795	Lyc ASA	6	3 5/8x4 1/2	31.54	Pb	Zen	P	Aut	Cov	U	4	Tim	Sp	31	4	Tr	160	4820	32x6	32x6D
*Gramm D	2 1/2	2195	Lyc TS	6	3 7/8x5	36	Pb	Zen	P	Aut	Cov	U	4	Tim	Sp	33	4	Tr	160	5100	32x6	32x6D
*Gramm E	3	2595	Lyc TS	6	3 7/8x5	36	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	35	4	R	150	5200	34x7	34x7D
*Gramm EY	3	3595	Con 20 R	6	4 1/8x4 3/4	40.80	Pb	Zen	P	Aut	Ful	U	4	Tim	Sp	30	4	D	190	6750	32x6	32x6D
*Gramm GY	4	4345	Con 21 R	6	4 3/8x4 3/4	45.9	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	28	4	D	210	7200	34x7	34x7D
*Gramm HY	5	6545	Con 16 H	6	4 3/4x5 3/4	54.15	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	25.2	4	D	236	9600	36x8	36x8D
*Gramm O-35	3	3595	Lyc TS	6	3 7/8x5	36	Pb	Zen	Vac	Aut	Ful	C	8	Wis	2R	71.2	D	R	153	7200	36x5S	36x10S
*Gramm O-45	4	3995	Lyc TS	6	3 7/8x5	36	Pb	Zen	Vac	Aut	Ful	C	8	Wis	2R	75.8	D	R	153	7700	36x5S	36x12S
*Gramm O-60	5	4745	Lyc TS	6	3 7/8x5	36	Pb	Zen	Vac	Aut	Ful	C	8	Wis	2R	78.4	D	R	153	8800	36x6S	36x14S
*Gramm T-38	3	3595	Lyc TS	6	3 7/8x5	36	Pb	Zen	Vac	Aut	Ful	U	4	Wis	2R	45	D	R	153	7200	36x5S	36x10S
*Gramm T-48	4	3995	Lyc TS	6	3 7/8x5	36	Pb	Zen	Vac	Aut	Ful	U	4	Wis	2R	47	D	R	153	7700	36x5S	36x12S
Indiana 64	1	1195	Con 27 B	6	3 3/8x4 5/8	27.3	Pb	Str	Vac	Aut	Br-L 20	U	3	Col 36020	Sp	21.3	4	Tr	137	3435	30x5	30x5
Indiana 74	1 1/4	1290	Con 27 B	6	3 3/8x4 5/8	27.3	Pb	Str	Vac	Aut	Br-L 20	U	4	Col 36020	Sp	25.6	4	Tr	137	3450	32x6	32x6
Indiana 89	1 1/2	1525	Con 27 B	6	3 3/8x4 5/8	27.3	Pb	Str	Vac	Aut	Br-L 20	U	4	Col 55002	Sp	25.6	4	Tr	149	3650	32x6	32x6
Indiana 11	1 1/4	1425	Her OX	4	4 x5	25.6	Pb	Str	Gra	Aut	Br-L 31	U	3	Cla B 365	Sp	24.48	R	R	129 1/2	3500	30x5	30x5
Indiana 111	1 1/2	1630	Her OX	4	4 x5	25.6	Pb	Str	Gra	Aut	Br-L 31	U	3	Cla B 509	Sp	26.4	R	R	129 1/2	3600	30x5	32x6
Indiana 111 XW	2	1850	Her OXP	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Wis 4611	2R	30.14	R	Tr	120	3740	32x6	32x6D
Indiana 120	2	1990	Con 30 B	6	4 x4 1/8	38.4	Pb	Str	P	Aut	Br-L 35	U	4	Tim 54003 H	Sp	—	4	Tr	156	5200	32x6	32x6D
Indiana 140	2	2495	Con 30 B	6	4 x4 1/8	38.4	Pb	Str	P	Aut	Br-L 35	U	4	Wis 4916 L	2R	—	4V	Tr	156	5500	32x6	32x6D
Indiana 115 A	2 1/2	2740	Her OXCP	4	4 1/4x5	28.9	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	42.99	R	Tr	132	4970	32x6	34x7D
Indiana 615 A	2 1/2	3070	Wis Y	6	3 3/8x5	27.34	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	46.29	R	Tr	136	5160	32x6	34x7D
Indiana 126	3	3780	Her L	4	4 1/2x3 3/4	32.4	Pb	Str	Vac	Eis	Br-L 55-7	C	7	Tim 65704 S P	Wo	80.7	R	Js	162 1/2	7400	36x5S	36x10S
Indiana 626	3	4185	Wis H	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L 55-7	C	7	Tim 65704 S P	Wo	73.6	R	Js	168 1/2	7625	36x5S	36x10S
Indiana 627	3	3725	Wis H	6	4 x5	38.40	Pb	Str	Vac	Aut	Br-L 55-4	U	4	Cla B 720	Sp	42.8	R	Ds	168 3/4	6500	32x6	38x9
Indiana 127 AW	3	3775	Her K	4	4 1/4x5	28.90	Pb	Str	Vac	Eis	Br-L 51-5	U	5	Wis 1228	2R	41.72	RV	Ds	158 1/4	7000	34x7	34x7D
Indiana 627 AW	3	4075	Wis H	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L 51-5	U	5	Wis 1228	2R	41.72	RV	Ds	156 1/4	7200	34x7	34x7D
Indiana 638	4	4955	Wis H	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L 60-7	C	7	Tim 66700 S P	Wo	83.1	R	Js	174 1/4	8100	36x5S	36x12S
Indiana 290	7	7250	Con 36 B	6	4 3/4 x5 3/4	54.15	Pb	Str	P	L-N	Br-L 70-7	C	7	Tim 68703 E	Wo	—	4W	Ds	182	10750	38x7	40x14S
Indiana 640	10	9700	Con 36 B	6	4 3/4 x5 3/4	54.15	Pb	Str	P	L-N	Br-L 70-7	C	7	Tim 6 Wh	Wo	—	4RW	Ds	212	14000	38x7	36x10S
Int. Harvester Sp. Del.	3/4	720	Wak X A	4	3 1/2x4 1/2	19.6	Pb	Zen	Vac	DR	Mec	U	3	Eat 502 R	Sp	15.1	4		124	2200	30x5.25	30x5.25
Int. Harv. 6 Spd. Spec.	1	820	Wak X A	4	3 1/2x4 1/2	19.6	Pb	Zen	Vac	DR	Mec	U	3	Eat 1124	Sp	*52.6	4		124	2430	30x5	30x5
Int. Harvester S-24	1 1/4	1160	Lyc C T	4	3 3/4 x5	22.5	Pw	Zen	Vac	DR	Own	U	3	Eat 1002	Sp	21.3	4		130	3200	30x5	30x5
Int. Harvester S-26	1 1/4	1310	Lyc 4 S L	6	3 1/4 x4 1/2	25.3	Pb	Zen	Vac	DR	Own	U	3	Eat 1002	Sp	21.3	4		130	3250	30x5	30x5
Int. Harvester SF-34	1 1/2	1450	Lyc C T	4	3 3/4 x5	22.5	Pw	Zen	Vac	DR	Own	U	3	Eat 1502	Sp	22.6	4		*140	3520	30x5	32x6
Int. Harvester SF-36	1 1/2	1600	Lyc 4 S L	6	3 1/4 x4 1/2	25.3	Pb	Zen	Vac	DR	Own	U	3	Eat 1502	Sp	22.6	4		*140	3570	30x5	32x6
Int. Harvester SD-44	2	1590	Lyc C T	4	3 3/4 x5	22.5	Pw	Zen	Vac	AB	Own	U	4	Eat 2002	Sp	40.6	4		117	3700	30x5	32x6
Int. Harvester SD-46	2	1740	Lyc 4 S L	6	3 1/4 x4 1/2	25.3	Pb	Zen	Vac	AB	Own	U	4	Eat 2002	Sp	40.6	4		117	3750	30x5	32x6
Int. Harvester SF-46	2	1950	Lyc 4 S L	6	3 1/4 x4 1/2	25.3	Pb	Zen	Vac	DR	Own	U	4	Eat 2002	Sp	40.6	4		*140	4000	32x6P	32x6DP
Int. Harvester A-4	2	1985	Own-FBB	6	3 5/8x4 1/2	31.5	Pb	Zen	Vac	DR	Own	U	5	Eat 1712	Sp	47.8	4		*145	5070	32x6	32x6DP
Int. Harvester A-5	3	2550	Own-FBB	6	3 5/8x4 1/2	31.5	Pb	Zen	Vac	DR	Own	U	5	Eat 2112	Sp	52.6	4		*156	5606	34x7	34x7DP
Int. Harvester HS-54	2 1/2	3850	Hall-S 151	4	4 1/4x5 1/2	28.9	Pb	Zen	Vac	RB	Own	U	5	Eat 54	2R	60.5	4		*148	8000	36x5S	36x8S
Int. Harvester HS-54-C	2 1/2	3850	Hall-S 151	4	4 1/4x5 1/2	28.9	Pb	Zen	Vac	RB	Own	U	5	Own A M 428	Ch	63.8	4		*148	8665	36x5S	36x10S
Int. Harvester W-1	2 1/2	3850	Hall-S 151	4	4 1/4x5 1/2	28.9	Pb	Zen	Vac	RB	Own	U	5	Eat 58	2R	60.5	4		*148	8300	36x5S	36x8S
Int. Harvester HS-74	3 1/2	4850	Hall-S 152	4	4 3/4x5 1/2	36.1	Pb	Zen	Vac	RB	Own	U	5	Eat 74	2R	70.5	4		*160	10700	36x5S	40x12S
Int. Harvester HS-74-C	3 1/2	4850	Hall-S 152	4	4 3/4x5 1/2	36.1	Pb	Zen	Vac	RB	Own	U	5	Own A M 427	Ch	79.1	4		*160	11000	36x6S	40x12S
Int. Harvester W-3	3 1/2	4850	Hall-S 152	4	4 3/4x5 1/2	36.1	Pb	Zen	Vac	RB	Own	U	5	Eat 78	2R	70.5	4		*160	10125	36x6S	40x12S
Int. Harv's'r HS-104-C	5	5500	Hall-S 152	4	4 3/4x5 1/2	36.1	Pb	Zen	Vac	RB	Own	U	5	Own A M 427	Ch	90.5	4		*160	11095	36x6S	40x14S
La France-Repub. A-1	*6000	990	Lyc	6	2 7/8x4 3/4	19.8	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	36.1	4	Tr	132	3000	5.50x20	32x6
La France-Repub. C-1	*7000	1295	Lyc	6	3 1/4x4 1/2	25.4	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.1	4	Tr	144	3300	6.00x20	32x6
La France-Repub. D-1	*9000	1595	Lyc	6	3 1/4x4 1/2	25.4	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	37.9	4	Tr	144	3725	30x5	30x5D
La France-Repub. F-1	*12000	2195	Lyc	6	3 1/4x4 1/2	25.4	Pb	Zen	Vac	Aut	Ful	U	4	Eat	Sp	43.0	4	D	155	4850	32x6	32x6D
La France-Repub. F-2	*13000	2395	Lyc	6	3 5/8x5	31.5	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	40.1	4	D	174	5870	32x6	32x6D
La France-Repub. H-1	*15000	2985	Lyc	6	3 7/8x5	36.0	Pb	Zen	Vac	Aut	Ful	U	4	Eat	Sp	36.0	4	D	163	5850	34x7	34x7D
La France-Repub. L-1	*18000	3595	Lyc	6	3 7/8x5	36.0	Pb	Zen	Vac	Aut	Ful	U	4	Eat	2R	48.0	4	D	180	6900	36x8	36x8D
La France-Repub. M-1	*20000	3800	Wak	6	4 x4 3/4	38.4	Pb	Zen	Vac	Aut	Br-L	U	5	Eat	2R	53.0	D	R	171	6900	36x8	36x8D
Mack AB	2 1/2-3	3950	Own	4	4 1/4 x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	2R	Opt	R	D	2-Opt	——	36x4S	36x8S
††Mack BJ	3 1/2-5	6150	Own	6	4 1/2x5 1/2	48.6	Pb	Str	Vac	NE	Own	C	4	Own	2R	Opt	4	D	3-Opt	——	36x8	36x8D
††Mack AK	3 1/2-5	5150	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	4	Js	3-Opt	——	36x5S	36x5DS
††Mack AK	3 1/2-5	5250	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	C	4	Own	2R	Opt	4	D	3-Opt	——	36x5S	36x5DS
††Mack AC	3 1/2-5	4950	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	Js	R	3-Opt	——	36x5S	40x10S
††Mack AC	5 1/2-7	5500	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	Js	R	3-Opt	——	36x6S	40x12S
††Mack AC	7 1/2	6000	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	Js	R	3-Opt	——	36x7S	40x14S
††Mack AP	7 1/2	9500	Own	6	5 x6	60.0	Pb	Str	Gra	NE	Own	J	4	Own	Ch	Opt	R	Js	191	——	36x7S	40x8DS
Mack BL	1	2500	Own	6	3 1/4x5	25.39	Pw	Str	Vac	NE	Own	U	4	Own	Sp	Opt	4	D	148	——	B6.00x20	DB6.00x20
††Mack BG	1 1/2	3000	Own	6	3 5/8x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	Sp	Opt	4	D	138-156	——	P32x6	DP32x6
††Mack AB	2 1/2-3	3500	Own	4	4 1/4 x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	Ch	Opt	R	D	2-Opt	——	36x4S	36x8S
Mack AB	2 1/2-3	4750	Own	6	3 5/8x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	2R	Opt	R	D	2-Opt	——	P34x7	DP34x7
††Mack AB	2 1/2-3	4300	Own	6	3 5/8x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	Ch	Opt	R	D	2-Opt	——	P34x7	DP34x7
††Mack BC	3 1/2-4	5250	Own	6	4 x5 1/2	38.4	Pb	Str	Vac	NE	Own	U	4	Own	2R	Opt	4	D	2-Opt	——	P36x8	DP36x8
††Mack BC	3 1/2-4	4250	Own	4	4 1/4 x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	2R	Opt	4	D	2-Opt	——	36x5S	36x5DS
Mack AC 6-wheel	10	7500	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	4R	Js	3-Opt	——	36x7S	40x12S
Mack AP 6-wheel	10	12000	Own	6	5 x6	60.0	Pb	Str	Gra	NE	Own	J	4	Own	Ch	Opt	4R	Js	3-Opt	——	36x7	40x12S
Paige	3/4	860	Own	6	3 1/4 x4 1/2	25.35	Pb	Stw	P	DR	W-G	U	3	Sal	Sp	17.36	4	Tr	115	2465	B5.50x19	B5.50x19
*Pierce-Arrow F A-1	1 1/2-2	2450	Own	6	3 1/2x5	29.4	Pw	Str	Pre	DR	Own	U	3	Tim	St	21.4	4	Tr	140	4100	32x6	32x6D
*Pierce-Arrow X A-1	2	3500	Own	4	4 x5 1/2	25.6	Pw	Str	Pre	DR	Own	C	4	Own	Wo	44.2	4Dv	R	150	6750	36x4	36x5DS
*Pierce-Arrow X B-1	3	3750	Own	4	4 x5 1/2	25.6	Pw	Str	Pre	DR	Own	C	4	Own	Wo	48.1	4Dv	R	150	6830	36x5	36x5DS
*Pierce-Arrow H B-1	5	4500	Own	4	4 x5 1/2	25.6	Pw	Str	Pre	DR	Own	C	7	Own	Wo	95.0	4Dv	R	156	8400	36x5	36x6DS
*†Pierce-Arrow W C-1	4	5100	Own	4	4 1/2x6 3/4	32.4	Pw	Str	Pre	DR	Own	C	4	Own	Wo	41.5	4Dv	R	162	8780	36x5	36x6DS
*†Pierce-Arrow R D-1	5	5400	Own	4	4 1/2x6 3/4	32.4	Pw	Str	Pre	DR	Own	C	4	Own	Wo	40.5	4Dv	R	162	9440	36x6	36x7DS
*†Pierce-Arrow R F-1	7 1/2	5600	Own	4	4 1/2x6 3/4	32.4	Pw	Str	Pre	DR	Own	C	4	Own	Wo	51.9	4Dv	R	168	10320	36x6	40x8DS
†Pierce-Arrow R F-T	7 1/2	5600	Own	4	4 1/2x6 3/4	32.4	Pw	Str	Pre	DR	Own	C	4	Own	Wo	51.9	4Dv	R	132	10200	36x6	36x8DS
Relay Series S 11	1	1700	Bud H S 6	6	3 3/8x4 1/2	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	25.7	4	D	142	4050	P30x5	P30x5
Relay Series S 11	1 1/2	1900	Bud H S 6	6	3 3/8x4 1/2	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	25.7	4	D	162	4500	P30x5	DP30x5
Relay Series 40	1 1/2	2990	Bud D S 6	6	3 5/8x5	31.2	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	D	168	5300	P34x5	DP34x5
Relay Series S 11	2	2030	Bud H S 6	6	3 3/8x4 1/2	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	30.0	4	D	162	4700	D32x6	DP32x6
Relay Series 40	2	3240	Bud D S 6	6	3 5/8x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	D	168	5500	P36x6	DP36x6
Relay Series 50	2	3860	Bud D W 6	6	3 3/4x5	33.7	PC	Zen	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	161	6800	P36x6	DP36x6
Relay Series 40	2 1/2	3240	Bud D S 6	6	3 5/8x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Own	Relay	34.5	4	D	168	5700	P36x6	DP36x6

Major Specifications and Mechanical Details of 1930 Commercial Cars Built in the United States

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Relay Series 50	2½	3950	Bud D W 6	6	3¾ x5	33.7	PC	Lon	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	161	7000	P36x6	DP38x7
Relay Series 60	2½	4530	Bud B U S	6	4 x5⅛	38.4	PC	Lon	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	175	7350	P36x6	DP36x6
Relay Series 50	3	4130	Bud D W 6	6	3¾ x5	33.7	PC	Lon	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	161	7200	P36x6	DP40x8
Relay Series 60	3	4595	Bud B U S	6	4 x5⅛	38.4	PC	Lon	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	175	7500	P36x6	DP38x7
Relay Series 80	3	5250	Bud B A 6	6	4⅛x5⅛	40.8	PC	Lon	Vac	Aut	Br-L	U	8	Own	Relay	84.18	4	D	175	8400	P36x6	S40x10
Relay Series 60	3½	4745	Bud B U S	6	4 x5⅛	38.4	PC	Lon	Vac	Aut	Br-L	U	5	Own	Relay	58.5	4	D	175	7800	P38x7	DP40x8
Relay Series 80	3½	5330	Bud B A	6	4⅛x5⅛	40.8	PC	Lon	Vac	Aut	Cov	A	8	Own	Relay	84.18	4	D	175	8600	P36x6	S40x12
Relay Series 80	4	5380	Bud B A	6	4⅛x5⅛	40.8	PC	Lon	Vac	Aut	Cov	A	8	Own	Relay	84.18	4	D	175	8800	P38x7	S40x14
Reo 15 Junior	½	785	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	DR	W-G	U	3	Sal	Sp	14.63	4	Tr	115	2290	5.50x18	5.50x18
Reo D A	1	995	Con 16 E	6	3⅜x4	27.3	Pb	Sch	Vac	DR	W-G	U	3	Own	Sp	18.4	4	Tr	123	2755	30x5	30x5
Reo D F	1	1095	Own C B	6	3⅜x4	27.3	Pb	Sch	Vac	DR	W-G	U	3	Own	Sp	18.4	4	Tr	138	2850	30x5	30x5
Reo F A	1½	1295	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	22.96	4	Tr	137	3525	32x6	32x6
Reo F E	1½	1395	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	22.96	4	Tr	152	3700	32x6	32x6
Reo F H	2	1595	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.6	4	Tr	142	4165	32x6	32x6D
Reo F C	2	1645	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.62	4	Tr	152	4025	32x6	32x6D
Reo F D	2	1745	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.62	4	Tr	168	4075	32x6	32x6D
Reo G A	3	2035	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	41.05	4	Tr	163	4625	32x6	32x6D
Reo G C	3	2140	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	41.05	4	Tr	179	4850	32x6	32x6D
Reo G D	3	1985	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	46.2	4	Tr	144	4570	32x6	32x6D
Rugby ½ T	½	655	Con	6	3¼ x4	25.4	Pb	Str	AC	Aut	Own	U	3	Own	Sp	15.6	4	4	—	2160	29x5	29x5
Rugby 6-15	1	865	Con	6	3¼ x4	25.4	Pb	Str	AC	Aut	Br-L	U	4	Sal	Sp	34.49	4	Tr	135	2900	20x5.50	32x6
Selden 7 C	1	1098	Con	6	2⅜x4¾	19.84	Pb	Zen	Vac	Aut	BB	U	3	Tim	Sp	—	4	D	124	3600	30x5	30x5
Selden 17 C	1½	1500	Con	6	3⅜x4	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	142	3900	32x6	32x6
Selden 317 C	1½	3900	Con	6	3⅜x4⅝	27.34	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	142	3900	32x6	32x6
Selden 37 C	2	1935	Con	6	3⅜x4⅝	27.34	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	151	4800	32x6	32x6D
Selden 39 C	2½	2920	Con	6	4 x4⅛	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	164	5800	32x6	32x6D
Selden 47 C B	3½	3785	Con	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	171	7200	34x7	34x7D
Selden 47 C D	4	4435	Con	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	5	Wis	2R	—	4	D	171	7600	36x8	36x8
Selden 67 C	5	4975	Con	6	4⅜x4¾	45.94	Pb	Str	Vac	Aut	Br-L	U	7	Wis	2R	—	4	D	171	8700	36x8	36x8D
Selden 77	7	7365	Con	6	4¾ x5¾	54.15	Pb	Str	Vac	Aut	Br-L	U	7	Wis	2R	—	4	D	178	12000	36x7	40x7D
Service Series S 11	1	1600	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	P30x5	P30x5
Service Series S 11	1½	1900	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	P30x5	DP30x5
Service Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	4700	P34x5	DP34x5
Service Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	PC	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4500	P32x6	DP32x6
Service Series 40	2	3240	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	4900	P36x6	DP36x6
Service Series 40	2½	3240	Bud D S 6	6	3⅝x5	31.5	PC	Zen	Vac	Aut	Br-L	U	4	Tim	W	34.8	4	D	168	5100	P36x6	DP36x6
Service Series 60	2½	4580	Bud B U S	6	4 x5⅛	38.4	PC	Zen	Vac	Aut	Br-L	U	5	Tim	W	63.0	4	D	175	7000	P36x6	DP36x6
Service Series 60	3	4680	Bud B U S	6	4 x5⅛	38.4	PC	Zen	Vac	Aut	Br-L	U	5	Tim	W	63.0	4	D	175	7100	P36x6	DP38x7
Service Series 80	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	PC	Zen	Vac	Aut	Br-L	A	7	Tim	W	98.2	4	D	175	8200	S36x6	S36x12
Service Series 80	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	PC	Zen	Vac	Aut	Br-L	A	7	Tim	W	98.2	4	D	175	8400	S36x6	S36x14
Service Series 100	5	5830	Bud B A 6	6	4⅛x5⅛	40.8	PC	Zen	Vac	Aut	Br-L	A	7	Tim	W	98.2	4	D	175	9600	S36x6	S40x14
Stewart 30	1	695	Lyc AFE	4	3¾x4½	22.5	Pb	Str	Vac	DR	W-G	U	4	Sal	Sp	—	4	D	130	2905	6.50x20	6.50x20
Stewart 30 X	1	795	Lyc WRG	6	2⅞x4½	19.8	Pb	Str	Vac	DR	W-G	U	4	Sal	Sp	—	4	D	130	2965	6.50x20	6.50x20
*Stewart 16 A	1¼	1195	Lyc CT	4	3¾ x5	22.5	Pb	Str	Vac	DR	W-G	U	4	Cla	Sp	24.0	4	D	130	3526	32x6	32x6
*Stewart 16 XA	1¼	1195	Lyc 4 SL	6	3¼x4½	25.3	Pb	Str	Vac	DR	W-G	U	4	Cla	Sp	24.0	4	D	130	3526	32x6	32x6
Stewart 28 X	1½	1495	Lyc 4 SL	6	3¼x4½	25.3	Pb	Str	Vac	DR	Ful	U	4	Cla	Sp	27.3	4	D	136	3840	30x5	30x5D
Stewart 29 X	2	1695	Lyc 4 SL	6	3¼x4½	25.3	Pb	Str	Vac	DR	Ful	U	4	Cla	Sp	27.3	4	D	145	4188	32x6	32x6D
Stewart 26 X W	2	2290	Lyc TF	6	3⅝x5	31.5	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	29.0	4	D	165	5095	32x6	32x6D
*Stewart 18 X	2½	2690	Lyc TF	6	3⅜x5	31.5	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	29.0	4	D	165	5788	32x6	32x6D
Stewart 32 X	2½	1990	Lyc ASA	6	3⅝x4¾	31.54	Pw	Str	Vac	DR	Ful	U	4	Cla	Sp	7.25:1	4	D	165	5100	32x6	32x6D
Stewart 33 X	3	3290	Lyc TS	6	3⅞x5	36.2	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	7.25:1	4	D	165	6450	34x7	34x7D
Stewart 19 X	3½	3690	Lyc TS	6	3⅞x5	36.2	Pw	Str	Vac	DR	Ful	C	12	Tim	Wo	105.1	4	D	165	6990	36x5	36x10
Stewart 31 X	5	4990	Wak 6 RSL	6	4⅜x5⅛	45.9	Pw	Str	Vac	DR	Ful	C	8	Tim	Wo	10.5:1	4	D	165	8400	36x6S	36x6SD
Stewart 27 X	6-7	5700	Wak 6 RSL	6	4⅜x5⅛	45.99	Pw	Str	Vac	DR	Ful	U	8	Tim	Wo	93.81	4	D	165	9927	36x7	40x7D
Studebaker GN-P	¾	845	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Own	U	3	Own	Sp	15.15	4	‡4	146	3265	30x5	32x6
Studebaker GN-S	1	1045	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Own	U	3	Own	Sp	13.8	4	D	158	5030	7.00x20	7.00x20D
Studebaker GK-N	1	1095	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Own	U	3	Own	Sp	13.8	4	D	184	5200	7.50x20	7.50x20D
Studebaker GN-N	*4000	1245	Own	6	3⅜x4⅝	27.3	Pb	Str	P	DR	Cla	U	4	Cla	Sp	33.5	4	D	184	5680	7.50x20	7.50x20D
Studebaker 77	*12500	2895	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	115	2465	6.00x19	6.00x19
Studebaker 88	*12500	3295	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	130	2990	6.00x20	30x5
Studebaker 99	*14000	3795	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	146	2955	30x5	30x5
Whippet 96 A	½	360	Own 96 A	4	3⅛x4¾	15.6	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.74	4	R	103¼	1691	28x4.75	28x4.75
Willys Six 98 B	½	525	Own 98 B	6	3¼x3⅞	25.35	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	13.43	4	B	110	1903	29x5.00	29x5.00
Willys Six C-101	1½	695	Own 98 B	6	3¼x3⅞	25.35	Pb	Til	Vac	Aut	Ful Wo	U	4	Cla	Sp	33.51	4	R	131	2675	30x5	30x5
†White 15 B	1	1545	Own GKA	4	3¾x5⅛	22.5	CS	Zen	Vac	L-N	Own	C	4	Own	Sp	18.6	R	R	133½	3242	30x5	30x5
†White 57	1¼	2725	Own GRC	4	4 x5¾	25.6	Pw	Zen	Vac	L-N	Own	U	4	Own	Sp	19.3	R	R	146	3755	32x6	32x6
†White 20 A	1½	2125	Own GKA	4	3¾x5⅛	22.5	CS	Zen	Vac	L-N	Own	C	4	Own	2R	32.1	R	R	145½	4412	34x5	34x5DP
†White 56	2	3125	Own GRC	4	4 x5¾	25.6	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	26.2	R	D	165	5096	36x4S	36x7S
†White 51 A	2½	3750	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	35.5	R	D	170	6256	36x5S	36x8S
†White 55	3½	4650	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	66.1	4	R	174	8512	36x5S	40x5SD
†White 52 T	3½	4700	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	76.5	4	R	129½	8236	36x5S	40x5SD
†White 52	5	5100	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	5	Own	IG	92.3	4	R	174	9184	36x6S	40x12S
†*White 58	3	4400	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	49.5	4	R	180	7535	36x5S	36x5SD
†White 60	1	1850	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	DR	Own	U	3	Own	Sp	17.9	4	D	138	3562	30x5	30x5
†White 61	1½	2450	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	DR	Own	U	4	Own	Sp	23.4	4	D	148	4612	30x5	30x5D
†White 59 A	7½	6000	Own 3 A	6	4 x5¼	38.4	Pw	Zen	P	L-N	Own	U	4	Own	Sp	66.5	4	D	155⅛	—	40x8	40x14S
Willys-Knight T-103	1½	825	Own KGT	6	2⅛x4⅜	20.7	Pb	Til	Vac	Aut	Ful Wo	U	4	Cla	Sp	39.27	4	B	131	2808	30x5	30x5
Willys-Knight 20	2	1945	Own KGT	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful KU	U	4	Eat	Sp	40.74	4	R	150	3800	32x6	34x7
Willys-Knight 21	2	1995	Own KGT	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful KU	U	4	Eat	Sp	40.74	4	R	164	3900	32x6	34x7
Willys-Knight 25	2½	2545	Own KGT	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful GU	U	4	Wis	2R	30.45	4	R	150	4920	32x6	32x6D
Willys-Knight 26	2½	2595	Own KGT	6	3⅜x4¾	27.3	Pw	Til	Vac	Aut	Ful GU	U	4	Wis	2R	30.45	4	R	164	5020	32x6	32x6D

GENERAL NOTATIONS

*†**REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the "SPECIAL NOTATIONS."

CAPACITIES given in this table are in tons or fractions of tons. *Shows maximum allowable gross weight in pounds.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

ENGINE—Bud, Buda; Con., Continental; Her, Hercules; Kgt, Knight; Lyc, Lycoming; Wak Waukesha; Wis, Wisconsin.

LUBRICATION—Pb, pressure lubrication to main and connecting rod bearings; Pw, full pressure lubrication to all bearings, including wrist-pins; CS, circulating splash; Sp, Splash.

CARBURETOR—Car, Carter; Joh, Johnson; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; Stw, Detroit lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, Gravity; Pre, Pressure; Vac, Vacuum tank; P, Fuel pump.

IGNITION — AB, American-Bosch; Aut, Electric Auto-Lite; Eis, Eisemann; L-N, Loece-Neville; N-E, North East; RB, Robert Bosch; D R, Delco-Remy.

TRANSMISSION—Br. L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G, Warner Gear.

LOCATION—C, Center, Amid; U, in unit with engine.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—St, Straight bevel; Sp, Spiral bevel; Wo, Worm; 2 R, Double Reduction; Ch, Chain; Relay, Relay drive.

BRAKES—Js, Jack shaft; R, Rear wheels; D, Drive shaft; 4, four-wheel; Tr, Transmission; W, Westinghouse air brake. B, Both front and rear wheels.

TIRES—B, Balloon; D, Dual; S, Solid.

SPECIAL NOTATIONS

AMERICAN-LA FRANCE

*Chief model also available as 2½-ton model, 34x7 tire, dual rear, weight 6,400. Price $3,900.

Chieftain model also available as Dump Truck, 160-inch wheel base.

Balloon tires optional on Chief, Chieftain and Big Chief models.

AUTOCAR

†Engines in these models are located under the driver's seat.

DAY-ELDER

Models GF and HF also available in 186-inch wheel base.

Model JF also available in the following wheel bases: 165, 180 and 204 inches.

Model KF also available in 202-inch wheel base and tractor 149.

DURANT LINE

*Price includes panel body.

GENERAL MOTORS TRUCK LINE

*Capacity indicated for each chassis is the recommended gross weight without exceeding rated capacity of tires. The tire size does not affect the straight rating for which chassis is guaranteed and each model is designed to operate satisfactorily under average conditions with loads giving a total gross weight chassis, body, equipment and payload, equal to straight rating given below. The additional standard wheel base lengths, the number of additional tire types (tire combinations—each type carrying a recommended gross weight) and the ton range on a nominal payload basis for each model is given below.

Model	Straight Rating	Additional Wh. Bases, ins.	Addit'l Tire Types	Payl'd Range
T-11	3809	None	None	½
T-15	5400	141	2	¾
T-17	6500	141	6	¾-1¼
T-19	8500	141, 152	16	1-2
T-25	8500	141, 152	11	1-1¾
T-30	11000	152, 164	12	1½-2½
T-42	14000	152, 164, 181	10	2-3½
T-44	15000	152, 164, 181	10	2-4
T-60	18500	166¾, 184½, 200¼	16	2½-4½
T-82	22000	167½, 185¼, 201	10	3-6
T-90	28000	201, 220	5	5-7½

Optional rear axle ratios are available for all models.

F. W. D.

*Indicates six-wheel model. Special power take-off transmission, which provides 3 power take offs which may be operated in any transmission speed, optional on all models.

GRAMM

*Models B, C, D and E are furnished in three wheel base lengths—others on request.

*Models GY and GYB also available in 190-inch wheel base.

*Models HY and HYB also available in 210-inch wheel base.

Tire sizes and electrical equipment optional, depending upon type of service—coach or van.

*Model O Series, Large engine, pneumatic tires, special wheel bases optional at extra cost.

*Model T Series, Large engine, pneumatic tires, special wheel bases and 8 speed transmission optional at extra cost.

MACK LINE

Other wheel bases furnished on all truck models.

On 6-wheel jobs, 4 rear wheels driven by chains, foot brake on 4 rear wheels.

HYP—Hypoid drive, single reduction.

††Made also in tractor models.

PIERCE-ARROW LINE

*Model FA1 also available as Model FA2, at $2,550 on 160-inch wheel base, weight 4,150 lbs., and also as Model FA3, at $2,250 on 180-inch wheel base, weight 4,200 lbs.

*Model XA1 also available as Model XA2, at $3,550 on 162-inch wheel base, weight 6,800 lbs.

*Model XB1 is also available as Model XB2, at $3,800 on 180-inch wheel base, weight 6,900 lbs.

*Model HB1 is also available as Model HB2, at $4,550 on 180-inch wheel base, weight 8,500 lbs., and also as Model HB3, at $4,600 on 198-inch wheel base, weight 8,700 lbs.

*Model WC1 is also available as Model WC2, at $5,150 on 180-inch wheel base, weight 8,950 lbs., and also as Model WC3, at $5,250 on 198-inch wheel base, weight 9,050 lbs.

*Model RD1 is also available as Model weight 9,650 lbs., and also as Model RD3, at $5,500 on 198-inch wheel base, weight 9,750 lbs.

*Model RF1 is also available as Model RF2, at $5,650 on 204-inch wheel base, weight 10,500 lbs.

†Seven-speed transmission also available.

REO LINE

RD2, at $5,450 on 180-inch wheel base.

*Tonner in wheel base, 123, 138; 1½-ton in wheel base, 137, 156, 152; 2-ton in wheel base, 152, 168; 3-ton in wheel base, 168, 179, 184.

RUGBY

F—Chassis weight includes body.

STEWART LINE

Model 30 and 30X can also be supplied in 120 and 140-inch wheel base.

*Models 16 and 16X can be supplied in 145-inch and 160-inch wheel base.

Model 28X can be supplied in 145, 160 and 176-inch wheel base.

Model 29X can be supplied in 160 and 176-inch wheel base.

*Model 26XW can be supplied in 148, 176 and 190-inch wheel base.

*Models 18X, 32X and 33X can be supplied in 148, 190 and 220-inch wheel base.

*Models 19X, 31X and 27X can be supplied in 148, 172, 190, 220 and 235-inch wheel base.

STUDEBAKER LINE

*Capacity Model GN-N is 4,000 lbs. for body, cab, driver and payload.

Maximum gross load, chassis, body and payload for Models 77 and 88 is 12,500 lbs. and for Model 99 is 14,000 lbs.

‡Hand brake same as foot brake, standard. Hand brake on drive shaft, special equipment.

Financial News: Range of Automotive Stocks

First Quarter Profits Are Over Expectations

NEW YORK, April 24.—Earnings reports of automotive manufacturing companies for the first quarter of this year are beginning to make their appearance in large volume. Thus far, there has been no cause for disappointment, declines in profits in most cases from the levels of the corresponding quarter of 1929 being less than had been anticipated.

Against this good showing, as compared with 1929, when all things are considered, is the fact that sharp recoveries have been made in nearly all cases from the levels in operations and earnings that prevailed in the final quarter of last year.

On the basis of the reports made public thus far, indications are that most of the dividend-paying companies will learn their requirements for the year. Among the larger vehicle manufacturing companies, General Motors and Hudson have already reported sufficient earnings in the first quarter to more than cover the dividend requirements for that period. Packard, however, failed to earn its requirement, due to reduced production and resulting lower margin of profit. Packard, however, should earn its dividend before the year is out.

OTHER FINANCIAL NEWS

PACKARD

The Packard Motor Car Company reports for the quarter ended March 31, 1930, net income of $2,654,247 after depreciation and Federal taxes and after setting aside from earnings of the quarter, reserves totaling $818,250. These earnings are equal to 17 cents a share on 15,000,000 no-par shares of stock. Net income before reserves of $3,472,497 is the comparable figure with a year ago when first quarter profits were $7,114,000, or 47 cents a share, on the present amount of stock. Last year no deduction was made from first quarter earnings for reserve account.

The change in policy on reserves was effected September last when Packard changed its fiscal year to correspond with the calendar year. The new policy is to set aside a portion of each month's profits in a reserve for miscellaneous general contingencies such as bonuses to executives and employees and price adjustments to distributors, etc. Formerly, the year's reserve was charged in a lump sum to fourth quarter profits. Under the new plan, quarterly earnings reports will be more uniform and will more nearly reflect actual earnings as they are realized.

Reserves totaled approximately $1,600,000 as of March 31 and cash and equivalent aggregated roughly $15,000,000 which was after payment of the first quarter's dividend of 25 cents a share on the stock.

PEERLESS

The Peerless Motor Car Corporation reports for the quarter ended March 31, 1930, net profit of $93,485 after charges, depreciation, etc., equivalent to 36 cents a share (par $50) on 258,589 shares of capital stock. This compares with $52,013, or 20 cents a share, in preceding quarter, and $23,833, or 9 cents a share, in March quarter of 1929.

Net profit for the six months ended March 31, 1930, was $145,499 after above charges, equal to 56 cents a share, comparing with net loss of $315,834 in corresponding period of previous fiscal year.

"These results were obtained although we were in full production only since March 1 on our popular priced standard eight," James A. Bohannon, president, said. "Production on our two other series, the master eight and the custom eight, was carried on since January."

"The improved showing for Peerless is indicative of the benefits being derived from installation of entirely new production facilities and an increased distributory organiaztion," Mr. Bohannon added.

"During the quarter we closed new sales outlets in many important markets including Milwaukee, Detroit, Indianapolis, Kansas City, Fort Worth, Los Angeles, San Francisco and Seattle.

YELLOW TRUCK AND COACH

Yellow Truck and Coach Manufacturing Company reports for the quarter ended March 31, 1930, consolidated net profit of $105,844, after expenses, depreciation, etc., equivalent to 70 cents a share on 150,000 shares of 7 per cent. preferred stock on which there is an accumulation of unpaid dividends. This compares with $58,852, or 39 cents a share on preferred, in first quarter of 1929.

Net sales in the quarter were $10,729,996, as compared with $12,921,999 in the corresponding quarter of 1929.

ELECTRIC AUTO-LITE

The Electric Auto-Lite Company today reported a gross operating profit of $2,771,135 for the first quarter ended March 31. These earnings include those of the company subsidiaries.

After deducting expenses of $832,027.67 and interest charges of $8,604.07, the company's net profit for the first quarter was $1,930,504.44, before Federal taxes were paid. The net profits were equal to $2 a share on common stock after provisions for preferred dividends.

Administrative, general and selling expenses for the quarter totaled $627,548.67, and other items of expense aggregated $207,478.99.

The company's new plant is in operation and the outlook for immediate production schedule pickups was reported as very good.

MOTOR WHEEL

Consolidated statement of Motor Wheel Corporation and subsidiaries as of March 31, 1930, shows total assets of $16,523,428, comparing with $17,185,844 on March 31, 1929, and surplus of $6,666,728, against $7,320,572. Current assets totaled $8,281,845 and current liabilities $1,260,718, as compared with $9,065,973 and $2,840,026, respectively, on March 31, 1929.

LINK-BELT

The Link-Belt Company reports for the quarter ended March 31, 1930, net profit of $650,304 after charges and Federal taxes, equivalent after dividend requirements on 6½ per cent. preferred stock to 82 cents a share on 709,177 no-par shares of common stock. This compares with $710,183, or 91 cents a share, in first quarter of 1929.

LIBBEY-OWENS GLASS

The Libbey-Owens Glass Company reports for the quarter ended March 31, 1930, net profit of $716,773 after depreciation, Federal taxes, provision for contingencies, etc., equivalent to 40 cents a share on 1,775,252 no-par shares of stock. This compares with $582,746 or 33 cents a share in the preceding quarter.

For six months ended March 31, 1930, net profit was $1,299,519 after above charges, equal to 73 cents a share on the 1,775,252 shares of stock.

BRIGGS & STRATTON

The Briggs & Stratton Corporation reports for the quarter ended March 31, 1930, net profit of $301,041 after charges and taxes, equivalent to $1 a share on 300,000 no-par shares of stock. This compares with $342,243, or $1.14 a share in first quarter of 1929.

S. F. Briggs, president, stated: "Sales of small gasoline engines continued to expand during the quarter and now constitute more than 40 per cent. of the company's sales volume. The number of engines shipped during the quarter was 15 per cent. in excess of shipments in the first quarter of 1929, and profits accruing from this department largely offset reduced activity in the automotive industry to which Briggs & Stratton supplies the major part of the automobile locks used.

"Unfilled orders on April 1 were 30 per cent. higher than on March 1, and substantially equal to unfilled orders on April 1, 1929."

The company will add one story to its five-story Milwaukee plant at a cost of approximately $60,000. The addition will provide 15,000 square feet of floor space, which will be available to motor division of the company. Expansion was necessitated by orders calling for increased production in the motor department.

Square D-Diamond

Directors of the Diamond Electrical Company and the Square D Company have approved a merger of the companies. The terms provide for a share-for-share exchange of 20,062 shares of Diamond Electrical common stock into Class B of the Square D, and 3.2 shares of Class A or 2.5 shares of Class B for each share of Diamond Electrical preferred.

Capitalization of the Square D Company, if all of the Diamond Electrical shares are deposited, will be 105,043 shares of Class A and 69,433 shares of Class B.

The deposit of more than 50 per cent. of the voting stock of the Diamond Electrical Company will be required to make the consolidation effective.

The Square D Company makes panel boards and electrical equipment.

NEW YORK CURB EXCHANGE

Sales		High	Low	Close	Net Chge
97500	Cities Service..	43½	41¾	43⅜	+1⅝
700	do pf	92⅞	92¼	92⅞	+ ⅛
	Con Dia Fibre...		No sales		
5800	Cord Corp	15	14¾	14⅞	+ ⅛
500	Doehler D C....	23	22⅛	23	+1¼
100	Durant Motor..	5½	5¼	5½	+ ⅛
	Fageol Motor...		No sales		
	Pedders		No sales		
	Federal Mogul..		No sales		
200	Federal Screw..	38½	38½	38½	— ½
	Fiat		No sales		
3100	Ford Canada...	38¼	36⅜	37½	+1½
2100	Ford France....	11¾	11⅜	11⅜	— ⅛
2400	Ford Ltd	19	18⅝	19	...
	Franklin Mfg...		No sales		
	Gen T & Rub..		No sales		
	Gr'nf'ld T & D		No sales		
	Hall Lamp		No sales		
	Henney		No sales		
	Hood Rubber...		No sales		
	India Tire		No sales		
	Isotta Fras		No sales		
	Jaeger		No sales		
	Lakey		No sales		
	McQuay Norris.		No sales		
1500	Nat Rub Mach.	23	22⅛	22⅛	— ½
1600	Paramount Cab.	8	7	8	— ¼
	Perfect Circle...		No sales		
	Pines Winter...		No sales		
	Pitt Pl Glass...		No sales		
	Rolls Royce Am		No sales		
	Ross Gear		No sales		
	Safe T Stat....		No sales		
500	Seiberling	10¼	10	10¼	...
120	Smith A O.....	240¼	237¾	240¼	+4¾
	Sparks With ...		No sales		
500	Stutz Motor....	3⅛	3⅛	3⅛	...
2000	Thermoid Co ..	27	26⅝	27	+ ¼
	Triplex		No sales		
	Tung Sol		No sales		
	U S Asbestos...		No sales		
200	Watson, J W...	3¾	3¾	3¾	— ⅛
	Wayne Pump ..		No sales		
	West Auto		No sales		
	Yellow Taxi N Y		No sales		

NEW YORK OVER-THE-COUNTER

Div.		Bid	Asked
6	American Hard Rubber..	58	61
....	Dixon (J) Crucible.....	168	..
3.50	Doehler Die Casting.....	37½	..
7	do pf	85	..
....	Eisemann Magneto	22	..
7	do pf	95	..
....	Rolls Royce Am.....	..	13
....	do pf	13	17
....	Splitdorf Beth Elec.....	5¼	6

CHICAGO STOCK EXCHANGE

Sales		High	Low	Last
700	Acme Steel	72	71	72
600	Allied Motor Ind...	17	16½	17
150	Allied Products	44¾	44½	44¾
300	Auburn Auto 257	255	255	
2000	Bendix Aviation ...	52¾	51¾	52⅝
5900	Borg-Warner	47½	46⅛	46⅜
400	do pf 101	100	101	
1650	Chicago Yellow Cab	30	29½	30
11800	Cord Corp	15⅛	14¾	15
100	Houdaille Hershey A	27	27	27
1500	do B	25½	25	25½
900	Jackson M S.....	18¼	17½	17¾
2000	Modine	70⅜	70	70
70	Mohawk Rubber	11	11	11
150	Muncie Gear A.....	6½	6	6½
150	do B	4	3⅜	4
750	Muskegon M S.....	24	23	23½
250	Noblitt Sparks	53¾	53⅜	53⅜
200	Pines Winterfront..	39½	39½	39½
10	Van Sicklen	18	18	18
100	Warchell pf	25	25	25
62	Waukesha Motor ...130	115½	130	

CLEVELAND STOCK EXCHANGE

Sales		High	Low	Last
50	Allen Ind	13	13	13
100	Glidden pr pf.....103	103	103	
50	Ohio Brass B	76	76	76
15	Packard Electric...	23¼	23¼	23¼
515	Seiberling Rubber...	10¼	10	10¼
400	Thompson Prod A..	35¼	35	35
100	Vichek Tool	15	15	15

DETROIT STOCK EXCHANGE

Sales		High	Low	Last
500	Alloy Steel B.....	8⅜	7½	8⅜
2651	Bower Roller B....	17⅝	17¼	17½
125	Detroit Gasket	26	26	26
412	Detroit Motor Bus..	6⅛	6	6
1945	Detroit Electric Bus.	10⅜	10	10⅜
6810	Excello	20½	19¼	20
100	Federal Screw	39	39	39
315	Federal Mot Truck.	11¾	11¾	11¾
300	Ford Motor of Can	39	37½	39
3375	G R Metalcraft....	10	9⅝	9⅝
384	General Motors	51⅝	51½	51⅝
453	Hall Lamp	14⅝	14½	14½
2005	Jackson M S.....	18⅜	17½	17½
425	Motor Bankers	23¾	23½	23¾
1040	MacAleer	19	17½	19
170	Pittsburgh Forge ..	22½	22½	22½
1179	Packard	21	20½	20½
200	Parker Rustproof...	120	118	120
100	Reo Motor vtc.....	12¾	12¾	12¾
140	Timken Axle	19⅝	19⅝	19⅝
214	Universal Products.	26½	26½	26½

CRUDE OIL PRODUCTION AND IMPORTS INCREASE

New York, April 24.—The American Petroleum Institute estimates that the daily average gross crude oil production in the United States for the week ended April 19, 1930, was 2,560,900 barrels, as compared with 2,561,150 barrels for the preceding week, a decrease of 250 barrels. The daily average production east of California was 1,933,000 barrels, as compared with 1,943,450 barrels, a decrease of 10,450 barrels.

Imports of petroleum (crude and refined oils) at the principal United States ports for the week ended April 19 totaled 1,791,000 barrels, a daily average of 255,857 barrels, compared with 1,401,000 barrels, a daily average of 200,143 barrels for the week ended April 12 and a daily average of 261,536 barrels for the four weeks ended April 19.

Wednesday, April 23, 1930.

NEW YORK STOCK EXCHANGE

High	Low	Div.	Stocks	Sales	High	Low	Close	Net Chg.
104⅞	7	....	Advance Rumely	100	19⅞	19⅞	19⅞ +	⅝
119	15	....	Advance Rumely pf..	100	35	35	35	....
223⅜	77	3	Air Reduction	7,100	143½	139⅞	143 +	2⅜
11¼	1	....	Ajax Rubber	1,000	2	2	2	....
75½	35⅛	3	Allis Chalmers	7,500	66½	65⅜	65⅞ +	1
76½	27	....	Am Bosch Magneto...	300	46⅞	46	46⅞ —	¼
69⅞	63	3	American Chain	200	64½	64½	64½ —	¼
101	70¼	7	Am Chain pf	100	99	99	99 —	1
8⅞	2	....	Am-La France	100	2⅞	2⅞	2⅞ +	¼
514	120	*4	Auburn	2,600	259	253¼	153¼ —	2¾
104⅜	25	2	Bendix Aviation	4,500	52¾	51¾	51⅞ +	¼
136¾	37	3	Bohn Alum	700	63	62	62¼ +	¼
86⅞	26	4	Borg-Warner	6,000	47⅝	46	46½ +	⅛
63⅛	8½	....	Briggs Mfg Co	14,100	22½	21½	22⅛ +	⅛
43½	17⅜	2	Briggs & Stratton....	100	31	31	31	....
73⅞	13	....	Brockway Motor	4,600	21⅞	18⅛	21⅞ +	3⅝
22⅞	8⅛	1	E G Budd Mfg	4,000	14⅞	14¼	14⅝ +	¼
14⅜	7¾	1	Budd Wheel	1,800	14	13½	13½ —	½
74	25	1.60	Bullard	8,200	69⅛	66⅞	67⅝ —	¾
78⅜	40¼	*3	Caterpillar Tractor...	2,600	77½	76¾	77 +	½
90¾	18	4.20	Checker Cab	16,200	48½	45¾	47⅜ —	¾
47½	20⅞	....	Chicago Pneu Tool...	600	32⅞	31⅝	32 +	⅝
37	20⅞	3	Chicago Yellow Cab..		No sales today			
135	26	3	Chrysler Corp	12,500	40	39⅛	39⅜ —	⅜
61⅝	25	3	Clarke Equipment ...	400	43½	43	43½	....
62⅝	18	2	Com Credit	2,100	36¼	35⅛	36⅛ +	⅛
105¾	70	6.50	Com Credit pf	10	93	93	93	....
76	22⅛	†1.60	Com Invest Trust....	1,300	48	47⅝	47¾ —	½
29⅜	5⅝	....	Continental Motors...	6,400	6⅝	6⅜	6½ —	⅛
123¼	50	*3.50	Cutler-Hammer	100	83¾	83¾	83¾ —	1¼
231	80	*4	Du Pont	3,600	139½	137¼	137¼ +	⅛
76¾	18	3	Eaton Axle & Spring.	1,800	31½	30¼	30⅜ —	⅞
174	50	6	Electric Auto-Lite ...	7,400	109	104½	106¾ —	1¾
104½	55	5	Electric Storage Bat..		No sales today			
22½	3¼	....	Emerson Brant A.....	100	5	5	5 +	⅝
73¾	15	2.50	Evans Auto Load.....	400	21½	21½	21½ —	½
22⅜	5	.80	Federal Motors	200	11¾	11⅝	11⅝ —	⅛
13¾	6	.64	Fifth Avenue Bus.....	20	9½	9½	9½	....
37	24½	1.60	Firestone T & R.....	1,300	26⅛	25⅝	25⅝ —	⅝
89⅝	79¾	6	Firestone T & R pf....	400	83⅞	83⅜	83⅜ —	½
20⅛	2⅛	....	Fisk Rubber	200	4⅝	4½	4⅝ +	⅛
82⅛	8	....	Fisk Rubber 1st pf...	20	18	18	18 —	⅛
33⅞	5	....	Gabriel Co	200	10	10	10	....
95⅜	55¼	1.60	General Electric	82,800	91¾	88¾	89⅜ —	1½
25	3	....	Gardner Motor	300	5⅝	5½	5½	....
91¾	33¼	*3	General Motors	77,000	52¼	50⅞	50⅞ —	⅛
126½	112	7	General Motors pf	300	124	124	124	....
64⅛	26	*2	Glidden Co	2,300	35⅛	34⅛	34⅜ —	⅛
106⅛	95	7	Glidden pf	10	102¾	102¾	102¾ —	¼
105¾	38¼	4	Goodrich	11,200	48	44⅜	44⅜ —	4⅛
115⅛	95½	7	Goodrich pf	100	100	100	100 +	2
154½	60	5	Goodyear T & R.....	3,000	85½	84	85 —	½
104⅞	86	7	Goodyear T & R pf..	200	102	101⅜	101⅜ —	⅝
54	7⅜	....	Graham-Paige Motor..	1,300	11½	10¾	11½ +	⅛
68⅜	5½	....	Hayes Body	9,400	15⅜	13⅝	14¾ +	1⅛
33½	21½	1.80	Hercules Motor	200	28½	28	28 —	⅛
52¾	.13	2	Houdaille-Hershey ...	1,500	25½	25¼	25¼ —	¼
93½	38	5	Hudson Motor Car....	9,300	51½	49	49 —	1¾
72	18	2	Hupp Motor Car.....	2,900	22½	21⅝	21⅝ —	⅜
32½	3½	....	Indian Motocycle	7,400	12	10¾	10¾ —	1⅛
14½	2	....	Intercon Rubber		No sales today			
142	65	2.50	Inter Harvester	9,500	111⅞	109	109⅝ —	1¼
145	137	7	Inter Harvester pf....		No sales today			
242¾	90	3	Johns-Manville	4,500	125¼	123⅛	123⅛ —	2¼
16½	1½	....	Jordan Motor Car....	700	3⅞	3¾	3¾ —	¼
24	3	....	Kelly-Springf'd	1,000	5¼	5	5	....
100	26	....	Kelly-Springf'd 6s pf.		No sales today			
94⅞	16	....	Kelly-Springf'd 8s pf.		No sales today			
59¾	18⅝	2	Kelsey-Hayes Wheel..	3,800	37	36	36 —	½
25	5	....	Lee Rubber & Tire...	100	8½	8½	8½ —	¼
61	37⅝	2.60	Link Belt		No sales today			
108⅞	22	2	Ludlum Steel	1,200	39⅞	38⅞	38⅞ +	¼
114¾	55⅛	6	Mack Trucks	3,400	82¼	80	81 —	1¼
89⅞	30	*2	Marlin Rockwell	100	48	48	48 —	1½
104	19	2	Marmon	1,000	29	28¾	28¾ +	⅛
18	2½	....	Martin Parry		No sales today			
34⅞	9	2	Mengel	600	20⅞	20⅛	20⅛ +	⅛
122⅞	44	2.50	Michigan Steel	800	70⅜	69⅞	70⅜ +	⅛
53	37	3	Midland Steel	100	40¼	40¼	40¼ —	½
28⅞	3¼	....	Miller Rubber		No sales today			
16½	1½	....	Moon Motors	1,600	11⅞	11½	11½ —	½
31¾	3¼	....	Motometer G & E....	800	9¼	9	9 —	⅛
142	36	2	Motor Products	500	72	70	70	....
55⅛	21	3	Motor Wheel Corp....	1,500	30	29¾	29⅞ —	⅛
81⅞	10	....	Mullins Mfg	1,000	19⅝	19½	19½ +	⅛
100⅞	14⅞	‡2	Murray Corp	2,000	23½	22¾	22¾ —	½
118⅞	40	6	Nash Motors	1,800	49⅞	49¼	49½	....
41⅞	14⅝	1.50	National Acme	1,600	23⅜	22½	22½ —	⅜
16¼	¾	....	Norwalk T & R.....	200	2⅝	2½	2½ —	⅛
10	9	....	Norwalk T & R pf....		No sales today			
10⅞	2½	....	Omnibus Corp	800	6⅞	6¾	6⅞ +	⅛
55	22¼	2.50	Otis Steel	300	34	34	34 +	⅜
32¼	13	1	Packard Motor Car...	20,800	21¼	20½	20½ —	¼
26⅛	15½	1.50	Parmalee Transport...	2,500	20	19¼	20 +	½
22½	5⅛	....	Peerless Motor Car...	1,500	8⅞	8½	8⅝ +	⅛
37⅝	18	....	Pierce-Arrow	400	32	31⅛	31⅛	....
87½	67¾	6	Pierce-Arrow pf	700	81½	81	81½ +	½
30¾	20	1.50	Pure Oil	5,400	26	25¼	26 +	¼
58⅞	28	2.60	Raybestos-Manhattan.	21,400	58	54½	56 —	½
31⅞	10⅛	.80	Reo Motors	300	12¾	12⅝	12⅝	....
12¼	3⅝	....	Reynolds Spring	500	5½	5⅜	5⅜ +	⅛
22½	9¾	1.20	Seagrave	100	10¾	10¾	10¾	....
31¾	19	1.40	Shell Union Oil.....	10,800	25¼	24⅛	25 +	⅜
45	21	2	Sinclair Oil	32,000	31⅜	29¾	31⅜ +	1
73	13⅛	1	Sparks-Withington ..	2,400	29½	28⅝	28⅝ —	¼
66¾	20⅛	....	Spicer Mfg Co	900	28⅞	28⅞	28⅞	....
55⅞	38	3	Spicer pf	200	42	42	42 —	2
81⅞	51½	2.50	Stand Oil of Cal.....	29,900	74¼	71⅛	74 +	2⅜
83	48	*1	Stand Oil of N J.....	256,200	83¾	78	82⅛ +	3¾
48⅛	31¼	1.60	Stand Oil of N Y.....	22,600	37¾	36	37¾ +	1⅜
77	30	*3.50	Stewart-Warner Spd..	800	42⅞	42¼	42¼ —	¾
98	38¼	5	Studebaker Co	1,300	41	40⅜	40⅜ —	⅛
126	115	7	Studebaker Co pf		No sales today			
39¼	33½	2.40	Thompson Products...	6,300	35¾	35	35¼ +	¼
34⅜	11½	.80	Timken Det Axle.....	300	19⅝	19½	19½ —	⅛
139¾	58½	3	Timken Roller Bear...	2,600	86¾	85	85 +	⅞
63	30	2.50	Trico	300	39	38⅞	39	....
243⅝	88¼	*6	U S Ind Alcohol.....	3,800	93⅝	91⅛	92⅝ +	1
65	15	....	U S Rubber	2,600	32⅛	31¼	31¼ —	¾
92½	40⅛	....	U S Rubber 1st pf....	1,900	57½	54½	54½ —	3¼
42⅞	15	1	Warner Quinlan	3,100	22⅞	22	22¾ —	½
67¾	36½	2	Westinghouse A B....	3,200	45	44¼	44½ —	½
53½	27¼	2	White Motors		No sales today			
61¼	19	2.50	Wilcox Rich A.....	100	31	31	31 —	⅛
62	12⅜	2	Wilcox Rich B.....	800	25⅜	25⅛	25⅛ —	⅜
35	5¼	....	Willys-Overland	3,600	9¼	8⅞	9	....
103	65	7	Willys-Overland pf ..	100	81	81	81 —	2
88	61¾	4	Yale & Towne	100	73	73	73 —	1
51¼	7½	....	Yellow Tr & C, B.....	28,300	32¾	30⅝	31½ —	⅞
105	72	....	Yellow Tr & C pf....		No sales today			
59¾	33½	3	Young (L A) S & W..	1,600	43⅜	42	42⅝ +	⅞

*And extra. †And 6 per cent. in stock. ‡And stock.

THE S. A. E. SUMMER MEETING
and the
SUMMER MEETING ISSUES OF
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May 26–27–28–29

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